



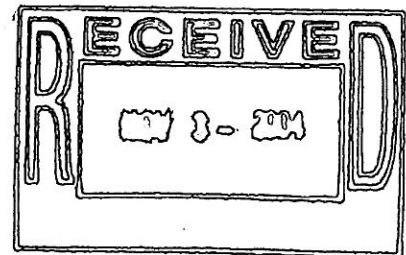
**Rocky Flats Environmental Technology Site**

**PRE-DEMOLITION SURVEY REPORT (PDSR)**

**2<sup>ND</sup> FLOOR & EXTERIOR OF BUILDING 707**

**REVISION 0**

**OCTOBER 20, 2004**



**ADMIN RECORD**

**Classification Review not required per  
Exemption number CEX-005-02**

DOES NOT CONTAIN  
OFFICIAL USE ONLY INFORMATION

Name/Org Shyne T. Wolfe/PRC Date 11/5/08

Directed  
by: J.A. Nesheim DOE M471.3-1


**B707-A-000128**

**PRE-DEMOLITION SURVEY REPORT (PDSR)**


**2<sup>ND</sup> FLOOR & EXTERIOR OF BUILDING 707**


**REVISION 0**

**OCTOBER 20, 2004**

Prepared by:  Date: 10/22/04  
Michael Grube Radiological Engineer

Reviewed by:  Date: 10/22/04  
Terry Vaughn, Radiological Safety Manager

Reviewed by:  Date: 10/22/04  
Robert Kury, 707/776 ESH&Q Manager

Approved by:  Date: 10/22/04  
David Delvecchio, 707/776 Project Manager

## TABLE OF CONTENTS

<b>ABBREVIATIONS/ACRONYMS</b> .....	<b>4</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>5</b>
<b>1 INTRODUCTION</b> .....	<b>6</b>
1.1 PURPOSE .....	6
1.2 SCOPE .....	6
1.3 DATA QUALITY OBJECTIVES .....	6
<b>2 HISTORICAL SITE ASSESSMENT</b> .....	<b>6</b>
<b>3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS</b> .....	<b>7</b>
<b>4 CHEMICAL CHARACTERIZATION AND HAZARDS</b> .....	<b>17</b>
4.1 ASBESTOS .....	17
4.2 BERYLLIUM (BE) .....	17
4.3 RCRA/CERCLA CONSTITUENTS [INCLUDING METALS AND VOLATILE ORGANIC COMPOUNDS (VOCs)] .....	17
4.4 POLYCHLORINATED BIPHENYLS (PCBS) .....	18
4.5 FREON.....	18
4.6 PHYSICAL HAZARDS.....	18
<b>5 DATA QUALITY ASSESSMENT</b> .....	<b>19</b>
<b>6 INDEPENDENT VERIFICATION</b> .....	<b>19</b>
<b>7 DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES</b> .....	<b>20</b>
<b>8 FACILITY CLASSIFICATION AND CONCLUSIONS</b> .....	<b>20</b>
<b>9 REFERENCES</b> .....	<b>21</b>

## ATTACHMENTS

- A Overview Map
- B B1-B45 Survey Unit Radiological Data Summary and Survey Maps
- C Chemical Data Summaries and Sample Maps
- D Data Quality Assessment Details

## ABBREVIATIONS/ACRONYMS

Be	Beryllium
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CDPHE	Colorado Department of Public Health and the Environment
DCGL <sub>EMC</sub>	Derived Concentration Guideline Level – elevated measurement comparison
DCGL <sub>W</sub>	Derived Concentration Guideline Level – Wilcoxon Rank Sum Test
D&D	Decontamination and Decommissioning
DDCP	Decontamination and Decommissioning Characterization Protocol
DOE	U.S. Department of Energy
DOP	Decommissioning Operations Plan
DQA	Data quality assessment
DQOs	Data quality objectives
EPA	U.S. Environmental Protection Agency
LBP	Lead-based paint
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MDA	Minimum detectable activity
OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated Biphenyls
PDS	Pre-demolition survey
PDSP	Pre-demolition survey plan
PDSR	Pre-demolition survey report
RCRA	Resource Conservation and Recovery Act
RFETS	Rocky Flats Environmental Technology Site
RLCR	Reconnaissance Level Characterization Report
RSA	Removable Surface Activity
RSP	Radiological Safety Practices
TSA	Total surface activity
TSCA	Toxic Substances Control Act
V&V	Verification and Validation
VOCs	Volatile organic compounds
WEMS	Waste and Environmental Management System



## EXECUTIVE SUMMARY

In order to keep the Pre Demolition Survey Reports (PDSR) a manageable size, and simplify the review process, multiple PDSRs will be issued for B707. The expected issuance of reports through the duration of the final survey process will be as follows:

**Report #1** - The main building - 2<sup>nd</sup> floor, 2<sup>nd</sup> floor annex and the entire exterior of B707

**Report #2** - B707, 1<sup>st</sup> floor (including the office and dock areas and modules A -K)

**Report #3** - B778 (Excluding the laundry, plenum room and west breezeway floor between the B776 office areas and B778. These floor surfaces were impacted by the 1969 B776 fire, and will be demolished as part of the B776/777 demolition)

**Report #1** covers the Pre-Demolition Survey performed to define the final radiological and chemical condition of the 2<sup>nd</sup> floor of the main building, the 2<sup>nd</sup> floor of the annex, and the exterior of building 707 in accordance with decommissioning objectives. These areas of the building were surveyed and will be released under this PDSR. Because B707 is classified as a type 3 structure and will be demolished, the characterization was performed on the building surfaces in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP). Environmental media beneath and surrounding this structure is not within the scope of this PDS and will be addressed by Environmental Restoration.

The PDS encompassed both chemical and radiological characterization. The characterization was based on physical, chemical and radiological hazards identified in the facility-specific *Building 707 Closure Project Decommissioning Operations Plan* and the associated *Reconnaissance Level Characterization Report*.

Based upon the results of this PDSR, the 2<sup>nd</sup> floor of the main building, the 2<sup>nd</sup> floor of the annex, and the exterior of building 707 meet the unrestricted release limits specified in the site Pre-Demolition Survey Plan. With CDPHE concurrence, this section of the building will be demolished with the rest of B707 and managed as sanitary waste. To ensure that the facility remains below the release levels and PDS data remain valid, Level 2 isolation controls have been established on areas undergoing final survey, and posted accordingly.

## 1 INTRODUCTION

A pre-demolition survey was performed to define the final radiological and chemical condition of this portion of the facility. Building 707 was categorized as a Type 3 facility based on the reconnaissance level characterization surveys performed. Because this structure will be demolished, the characterization was performed in accordance with the Pre-Demolition Survey Plan (MAN-127-PDSP). The results of this survey demonstrate the 2<sup>nd</sup> floor of the main building, the 2<sup>nd</sup> floor of the annex, and the exterior of building 707 meet the unrestricted release limits specified in the site Pre-Demolition Survey Plan prior to demolition. Environmental media beneath and surrounding this area was not within the scope of this PDS and will be addressed by Environmental Restoration.

As part of the Rocky Flats Environmental Technology Site (RFETS) Closure Project, numerous facilities will be removed. Building 707 no longer supports the RFETS mission and will be removed to reduce Site infrastructure, risks and/or operating costs.

Before this structure can be demolished, the Data Quality Objectives (DQOs) for a Pre-Demolition Survey (PDS) must be satisfied. This document presents the PDS results of the 2<sup>nd</sup> floor of the main building, the 2<sup>nd</sup> floor of the annex, and the exterior of building 707. The PDS was conducted pursuant to the Decontamination and Decommissioning Characterization Protocol (MAN-077-DDCP) and the Pre-Demolition Survey Plan for D&D Facilities (MAN-127-PDSP).

### 1.1 Purpose

The purpose of this report is to communicate and document the results of this portion of the B707 PDS effort. A PDS is performed prior to building demolition to define the pre-demolition radiological and chemical conditions of a facility. The pre-demolition conditions are compared with the release limits for radiological and non-radiological contaminants. PDS results will enable project personnel to make final disposition decisions, develop related worker health and safety controls, and estimate waste volumes by waste types.

### 1.2 Scope

This report presents the pre-demolition radiological and chemical conditions of the 2<sup>nd</sup> floor of the main building, the 2<sup>nd</sup> floor of the annex, and the exterior of building 707. Environmental media beneath and surrounding the facility are not within the scope of this PDSR and will be addressed by Environmental Restoration.

### 1.3 Data Quality Objectives

The Data Quality Objectives (DQOs) used in designing this PDS were the same DQOs identified in the Section 2.0 of the Pre-Demolition Survey Plan for D&D Facilities (MAN-127-PDSP). Refer to section 2.0 of MAN-127-PDSP for these DQOs.

## 2 HISTORICAL SITE ASSESSMENT

A facility-specific Hazards Characterization Report was conducted to understand the facility history and related hazards. This report, *The Building 707 Closure Project Decommissioning Operations Plan (DOP)* and the *associated Reconnaissance Level Characterization Report (RLCR)*, Revision 0) focused on the more highly contaminated sections of the B707 cluster. Reconnaissance level characterization surveys were performed on this structure.

### 3 RADIOLOGICAL CHARACTERIZATION AND HAZARDS

The 2<sup>nd</sup> floor of the main building, the 2<sup>nd</sup> floor of the annex, and the exterior of building 707 were characterized for radiological hazards per the PDSP. Radiological characterization was performed to define the nature and extent of radioactive materials that may be present on the facility surfaces.

All contaminated piping systems, ducting and components have been removed from the 2<sup>nd</sup> floor. Within the past year, extensive characterization surveys were performed on the interior and exterior surfaces of air handling equipment on the 2<sup>nd</sup> floor of B707 after being taken out of service. This included the plenums, filter units, and the associated ducting. Supply and return ducting was surveyed extensively to provide reasonable assurance that equipment fans remaining in place were not contaminated.

Measurements were performed to evaluate the contaminants of concern (weapons-grade plutonium isotopes). Based upon historical and process knowledge, in-process survey data, building walk-downs, and MARSSIM guidance, a Radiological Characterization Plan in the form of forty-five (45) survey packages was developed during the planning phase that describes the minimum survey requirements (refer to the following table for the applicable survey units).

**Table 1**  
**Survey Breakdown Structure**

Survey Unit	MARSSIM Class	Survey Unit Description	# of Random/ Systematic Measurements	# of Biased Equipment Measurements
707008	2	Room 200 East Quadrant - 2nd Floor	16	40
707009	2	Room 200 West Quadrant - 2nd Floor	16	40
707010	2	Room 210 Quadrant - 2nd Floor	25	25
707011	2	Room 220 East Quadrant - 2nd Floor (Walls and ceiling only)	15	50
707012	2	Room 220 West Quadrant - 2nd Floor	15	45
707016	1	2 <sup>nd</sup> Floor - Annex floor - Column lines L-M, 1-5.4	40	0
707017	2	2 <sup>nd</sup> Floor - Annex floor - Column lines M-N, 1-5.4	15	5
707018	2	2 <sup>nd</sup> Floor - Annex floor - Column lines N-O, 1-5.4	15	5
707019	2	2 <sup>nd</sup> Floor - Annex floor - Column lines O-P, 1-5.4	15	5
707020	2	2 <sup>nd</sup> Floor - Annex floor - Column lines P-Q, 1-5.4	15	0
707101	1	Reclassification - Room 220 East Quadrant Floor- 2 <sup>nd</sup> Floor	15	10
707102	1	Reclassification - Room 220 East Quadrant Floor- 2 <sup>nd</sup> Floor	15	0
707103	1	Reclassification - Room 220 East Quadrant Floor- 2 <sup>nd</sup> Floor	15	0
707104	1	Reclassification - Room 220 East Quadrant Floor- 2 <sup>nd</sup> Floor	15	5
707105	1	Reclassification - Room 220 East Quadrant Floor - 2 <sup>nd</sup> Floor	15	15
707106	1	Reclassification - Room 220 East Quadrant Floor - 2 <sup>nd</sup> Floor	15	0
707107	1	Reclassification - Room 220 East Quadrant Floor - 2 <sup>nd</sup> Floor	15	15
707108	1	Reclassification - Room 220 East Quadrant - 2 <sup>nd</sup> Floor	15	0
707109	1	Reclassification - Room 220 East Quadrant - 2 <sup>nd</sup> Floor	15	5
707110	1	Reclassification - Room 220 East Quadrant - 2 <sup>nd</sup> Floor	15	5
707111	1	Reclassification - Room 220 East Quadrant - 2 <sup>nd</sup> Floor	15	0

Survey Unit	MARSSIM Class	Survey Unit Description	# of Random/ Systematic Measurements	# of Biased Equipment Measurements
707112	1	Reclassification - Room 220 East Quadrant - 2 <sup>nd</sup> Floor	15	5
707115	1	2 <sup>nd</sup> floor annex east end, walls and ceiling	15	5
707116	1	Room 200 west end walls & ceiling	15	0
707300	2	2 <sup>nd</sup> floor annex walls and ceiling	15	10
707302	2	Biased measurements on 2 <sup>nd</sup> floor equipment	N/A	220
707200	3	B707 north office roof area	15	0
707201	3	B707 south office roof area	15	0
707202	3	B707 roof area above vault	15	0
707203	3	B707 roof area above east end of room 200	15	0
707204	3	B707 roof area above east end of room 210	15	0
707205	3	B707 roof area above east end of room 220	15	0
707206	3	B707 roof area above west end of room 200	15	0
707207	3	B707 roof area above west end of room 210	15	0
707208	3	B707 roof area above west end of room 220	15	0
707209	3	B707 annex roof area	15	0
707210	3	B707 northeast lower wall	15	0
707211	3	B707 northeast upper wall	15	0
707212	3	B707 southeast lower wall	15	0
707213	3	B707 southeast upper wall	15	0
707214	3	B707 south wall	15	0
707215	3	B707 west wall	15	0
707216	3	B707 annex wall	15	0
707217	3	B707 north wall	15	0
707218	3	B707 vault walls	15	0

In addition to the TSAs and RSAs at the measurement locations above, scans were performed at the following survey density:

#### Class 1 Survey Units

- A 100% scan of accessible surfaces of the floors and pedestals was performed.
- A 100% scan of lower walls (if applicable)
- A minimum of a 50% scan of the upper walls and ceiling surfaces.

#### Class 2 Survey Units

- A 100% scan of accessible surfaces of the floors and pedestals was performed.
- A minimum of a 25% scan was performed on lower wall surfaces and the lower surfaces of plenums, filter units etc. (2 meters and below).
- A minimum of a 10% scan was performed on wall and ceiling surfaces as well as adjacent equipment in the overhead.

#### Class 3 Survey Units on the exterior of the building

- A minimum of a 5% scan was performed on wall and roof surfaces.

Based on hazards characterization data and historical and process knowledge, as documented in Technical Basis Document 00168 "*Building 707/778 Technical Justification For Types of Radiological Surveys Performed*", transuranic isotopes are the primary contaminants of concern in the Building 707 Cluster. Therefore, the PDS was performed to the transuranic PDS unrestricted release criteria. Individual radiological survey unit packages are maintained in the Building 707/776/777 Characterization Project files.

The survey unit packages were developed in accordance with Radiological Safety Practices (RSP) 16.01, *Radiological Survey/Sampling Package Design, Preparation, Control, Implementation and Closure*. Total surface activity (TSA), removable surface activity (RSA), media samples, and scan measurements were collected in accordance with RSP 16.02 *Radiological Surveys of Surfaces and Structures*. Radiological survey data were verified, validated and evaluated in accordance with RSP 16.04, *Radiological Survey/Sample Data Analysis*. Quality control measures were implemented relative to the survey process in accordance with RSP 16.05, *Radiological Survey/Sample Quality Control*. Radiological survey data, statistical analysis results, survey locations, and radiological scan maps are presented in Attachments B1 through B45, *Radiological Data Summary and Survey Maps*.

#### **Survey Unit 707008**

This survey unit is comprised of the floor, walls and ceiling in the east portion of room 200, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. No contamination in excess of the unrestricted release limits was anticipated. A total of 16 random TSA and RSA measurements and 40 biased TSA and RSA equipment measurements were collected for the survey unit. In addition, 12 media samples were collected to ensure no contamination exists in the paint/floor sealant. The floors were subsequently shaved to minimize the presence of hot spots. Class 2 surface scan surveys of the accessible floor, wall, and ceiling surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA survey results in survey unit 707008 as well as the media samples obtained prior to shaving were less than the applicable PDS transuranic DCGL values. One biased TSA exceeded 100 dpm/100 cm<sup>2</sup>. However, a nine-point investigation was performed to verify the value was <300 dpm/100 cm<sup>2</sup>, and the square meter average was <100 dpm/100 cm<sup>2</sup>. Several spots of contamination were discovered on the floor surfaces. These areas were investigated, and or remediated to < 300 dpm/100 cm<sup>2</sup>. See Attachment B1 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707008.

#### **Survey Unit 707009**

This survey unit is comprised of the floor, walls and ceiling in the west portion of room 200, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. No contamination in excess of the unrestricted release limits was anticipated. A total of 16 random TSA and RSA measurements and 40 biased TSA and RSA equipment measurements were collected for the survey unit. In addition, 14 media samples were collected to ensure no contamination exists in the paint/floor sealant. The floors were subsequently shaved to minimize the presence of hot spots. Class 2 surface scan surveys of the accessible floor, wall, and ceiling surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA survey results in survey unit 707009 as well as the media samples obtained prior to shaving were less than the applicable PDS transuranic DCGL values. During the scanning process, contamination > DCGLw was detected in the overhead and on wall surfaces in the southwest portion of this survey unit. This area was isolated, reclassified class 1 (new survey unit - 707116), and remediated. During the scanning process, several spots of contamination were discovered on the surface. These areas were investigated, and/or remediated to < 300 dpm/100 cm<sup>2</sup>. See Attachment B2 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707009.

#### **Survey Unit 707010**

This survey unit is comprised of the floor, walls and ceiling in room 210, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. No contamination in excess of the unrestricted release limits was anticipated. A total of 25 random TSA and RSA measurements and 25 biased TSA and RSA equipment measurements were collected for the survey unit. In addition, 15 media samples were collected to ensure no contamination exists in the paint/floor sealant. The floors were subsequently shaved to minimize the presence of hot spots. Class 2 surface scan surveys of the accessible floor, wall, and ceiling surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA survey results in survey unit 707010 as well as the media samples obtained prior to shaving were less than the applicable PDS transuranic DCGL values. Several spots of contamination were discovered on the floor surfaces. These areas were investigated, and or remediated to < 300 dpm/100 cm<sup>2</sup>. See Attachment B3 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707010.

#### **Survey Unit 707011**

This survey unit is comprised of the walls and ceiling in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. No contamination in excess of the unrestricted release limits was anticipated. A total of 15 random TSA and RSA measurements and 50 biased TSA and RSA equipment measurements were collected for the survey unit. 15 media samples were collected previously on the floor. 4 of the media samples on the floor exceeded 100 dpm/100 cm<sup>2</sup>. The floor was separated from this survey unit and reclassified as class 1 survey units 707101 through 707112. Class 2 surface scan surveys of the accessible floor, and ceiling surfaces of this survey unit were also performed at the scan frequencies specified above.

All random TSA and RSA survey results in survey unit 707011 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup>. See Attachment B4 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707011.

#### **Survey Unit 707012**

This survey unit is comprised of the floor, walls and ceiling in the west end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. No contamination in excess of the unrestricted release limits was anticipated. A total of 15 random TSA and RSA measurements and 45 biased TSA and RSA equipment measurements were collected for the survey unit. In addition, 15 media samples were collected to ensure no contamination exists in the paint/floor sealant. Class 2 surface scan surveys of the accessible floor, wall, and ceiling surfaces were also performed at the scan frequencies specified above.

All random TSA, RSA and media sample results in survey unit 707012 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$ . See Attachment B5 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707012.

#### **Survey Unit 707016**

This survey unit is comprised of the floor in the east end of room 240 (the 2<sup>nd</sup> floor annex, B707). It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination on the floor, walls, and in the overheads during the scanning process. This section of the annex was isolated from the rest of the annex, and remediated. After remediation, a total of 40 random TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above. Several spots of contamination were detected on the floor and remediated.

All random TSA and RSA sample results in survey unit 707016 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$  after spot remediation. See Attachment B6 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707016.

#### **Survey Unit 707017**

This survey unit is comprised of the floor in room 240 (the 2<sup>nd</sup> floor annex, B707). It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. A total of 15 random and 5 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 2 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above. Several spots of contamination were detected on the floor and remediated.

All random TSA and RSA results in survey unit 707017 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$  after spot remediation. See Attachment B7 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707017.

#### **Survey Unit 707018**

This survey unit is comprised of the floor in room 240 (the 2<sup>nd</sup> floor annex, B707). It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. A total of 15 random and 5 biased TSA and RSA measurements were collected for the survey unit. One TSA exceeded  $100 \text{ dpm}/100 \text{ cm}^2$ . However, the investigation verified that the value was  $< 100 \text{ dpm}/100 \text{ cm}^2$ . A nine-point survey was also obtained to ensure the square meter average is  $< 100 \text{ dpm}/100 \text{ cm}^2$ . The floor has been shaved. Therefore, no media samples were required. Class 2 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above. Several spots of contamination were detected on the floor and remediated.

All random TSA and RSA results in survey unit 707018 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$  after spot remediation. See Attachment B8 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707018.

### **Survey Unit 707019**

This survey unit is comprised of the floor in room 240 (the 2<sup>nd</sup> floor annex, B707). It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. A total of 15 random and 5 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 2 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above. Several spots of contamination were detected on the floor and remediated.

All random TSA and RSA results in survey unit 707019 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup> after spot remediation. See Attachment B9 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707019.

### **Survey Unit 707020**

This survey unit is comprised of the floor in room 240 (the 2<sup>nd</sup> floor annex, B707). It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. A total of 15 random TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 2 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above. Several spots of contamination were detected on the floor and remediated.

All random TSA and RSA results in survey unit 707020 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup> after spot remediation. See Attachment B10 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707020.

### **Survey Unit 707101**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random and 10 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707101 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup>. See Attachment B11 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707101.

### **Survey Unit 707102**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.



All random TSA and RSA sample results in survey unit 707102 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$ . See Attachment B12 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707102.

### **Survey Unit 707103**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707103 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$ . See Attachment B13 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707103.

### **Survey Unit 707104**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random and 5 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707104 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$ . See Attachment B14 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707104.

### **Survey Unit 707105**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random and 15 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707105 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$ . See Attachment B15 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707105.

### **Survey Unit 707106**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media.

After remediation, a total of 15 random TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707106 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup>. See Attachment B16 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707106.

#### **Survey Unit 707107**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random and 15 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707107 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup>. See Attachment B17 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707107.

#### **Survey Unit 707108**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707108 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup>. See Attachment B18 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707108.

#### **Survey Unit 707109**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random and 5 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707109 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup>. See Attachment B19 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707109.

### **Survey Unit 707110**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random and 5 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707110 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$ . See Attachment B20 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707110.

### **Survey Unit 707111**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707111 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$ . See Attachment B21 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707111.

### **Survey Unit 707112**

This survey unit is comprised of the floor in the east end of room 220, on the 2<sup>nd</sup> floor of B707. It is classified as a Class 1 survey unit. The classification was based on the discovery of contamination in the floor media. The floor was shaved to remove the contaminated media. After remediation, a total of 15 random and 5 biased TSA and RSA measurements were collected for the survey unit. The floor has been shaved. Therefore, no media samples were required. Class 1 surface scan surveys of the accessible floor surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA sample results in survey unit 707112 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300 \text{ dpm}/100 \text{ cm}^2$ . See Attachment B22 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707112.

### **Survey Unit 707115**

This survey unit is comprised of the walls and ceiling in room 240 between column lines L & M (the 2<sup>nd</sup> floor annex, B707). It is classified as a Class 1 survey unit. The classification was based on the contamination detected during the scan process of final survey. A total of 15 random TSA and RSA measurements were collected for the survey unit. Class 1 surface scan surveys of the accessible wall and ceiling surfaces of this survey unit were also performed at the scan frequencies specified above. One hot spot was detected on the wall during the scan process, and was remediated.

### **Survey Unit 707115**

This survey unit is comprised of the walls and ceiling in room 240 between column lines L & M (the 2<sup>nd</sup> floor annex, B707). It is classified as a Class 1 survey unit. The classification was based on the contamination detected during the scan process of final survey. A total of 15 random TSA and RSA measurements were collected for the survey unit. Class 1 surface scan surveys of the accessible wall and ceiling surfaces of this survey unit were also performed at the scan frequencies specified above. One hot spot was detected on a metal beam attached to the wall during the scan process. The metal beam was removed.

All random TSA and RSA survey results in survey unit 707115 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup> after remediation. See Attachment B23 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707115.

### **Survey Unit 707116**

This survey unit is comprised of the walls and ceiling in room 200 on the 2<sup>nd</sup> floor of B707). It is classified as a Class 1 survey unit. The classification was based on the contamination detected during the scan process of final survey. A total of 15 random TSA and RSA measurements were collected for the survey unit. Class 1 surface scan surveys of the accessible wall and ceiling surfaces of this survey unit were also performed at the scan frequencies specified above.

All random TSA and RSA survey results in survey unit 707116 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup>. See Attachment B24 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707116.

### **Survey Unit 707300**

This survey unit is comprised of the walls and ceiling in the west end of room 240 (the 2<sup>nd</sup> floor annex, B707). It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. No contamination in excess of the unrestricted release limits was anticipated. A total of 15 random TSA and RSA measurements and 10 biased TSA and RSA equipment measurements were collected for the survey unit. Class 2 surface scan surveys of the accessible wall and ceiling surfaces were also performed at the scan frequencies specified above.

All random TSA and RSA results in survey unit 707300 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were < 300 dpm/100 cm<sup>2</sup>. See Attachment B25 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707300.

### **Survey Unit 707302**

This survey unit is comprised of TSA and RSA measurements on the external surfaces of the remaining plenums, filter units and air handling units on the 2<sup>nd</sup> floor of B707. It is classified as a Class 2 survey unit. The classification was based on the minimal potential for contamination due to process history. No contamination in excess of the unrestricted release limits was anticipated. A total of 220 random TSA and RSA measurements were collected for the survey unit. Scans were performed on this equipment during the final survey of the applicable survey areas, and therefore were not repeated in this survey unit. As stated previously, within the past year, extensive characterization surveys were performed on the interior surfaces of air handling equipment on the 2<sup>nd</sup> floor of B707 after being taken out of service. This included the plenums, filter units, and the associated ducting. Supply and return ducting was surveyed extensively to provide reasonable assurance that equipment fans remaining in place were not contaminated.

15

All random TSA and RSA results in survey unit 707302 were less than the applicable PDS transuranic DCGL values. See Attachment B26 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey unit 707302.

#### **Survey Units 707200-707218**

These survey units are comprised of the walls and roof on the exterior of B707. They are classified as a Class 3 survey units. The classification was based on the minimal potential for contamination due to process history. No contamination in excess of the unrestricted release limits was anticipated. A minimum of 15 random TSA and RSA measurements was collected for each survey unit. A minimum of a 5% scan survey of the accessible wall and roof surfaces was also performed. No elevated measurements were detected.

All random TSA and RSA results in survey units 707200-707218 were less than the applicable PDS transuranic DCGL values. All scanned surfaces were  $< 300$  dpm/100 cm<sup>2</sup>. See Attachment B27 for radiological survey data, statistical analysis results, survey locations, and radiological scan maps for survey units 707200-707218.

### **4 CHEMICAL CHARACTERIZATION AND HAZARDS**

#### **4.1 Asbestos**

No asbestos-containing materials are present in these areas. Asbestos abatement was successfully completed.

#### **4.2 Beryllium (Be)**

**Room 200** of building 707 was listed on the Historical List of Rooms with potential beryllium contamination. The historical records indicate that the potential beryllium contamination was internal to the plenum and Zone 1 exhaust system. Both baseline and routine sampling of this room revealed no removable beryllium contamination outside of the exhaust system. Since the baseline survey, the room has been stripped of internally contaminated beryllium contaminated systems. The final beryllium surveys for this area were collected on August 27, 2004. All samples were below the analytical detection limit of 0.1ug/100 cm<sup>2</sup>. Samples were collected on horizontal surfaces from floor to ceiling. PDS beryllium laboratory sample data and location maps are contained in Attachment C, *Chemical Data Summaries and Sample Maps*.

**Room 210** of building 707 was never listed on the Historical List of Rooms with potential beryllium contamination. Both baseline and routine sampling of this room revealed no removable beryllium contamination outside of the exhaust system. The final beryllium surveys for this area were collected on August 27, 2004. All samples were below the analytical detection limit of 0.1ug/100 cm<sup>2</sup>. Samples were collected on horizontal surfaces from floor to ceiling. PDS beryllium laboratory sample data and location maps are contained in Attachment C, *Chemical Data Summaries and Sample Maps*.

**Room 220** of building 707 was listed on the Historical List of Rooms with potential beryllium contamination. The historical records indicate that the potential beryllium contamination was internal to the plenum and Zone 1 exhaust system. Both baseline and routine sampling of this room revealed no removable beryllium contamination outside of the exhaust system. Since the baseline survey, the room has been stripped of internally contaminated beryllium contaminated systems. The final beryllium surveys for this area were collected on August 27, 2004. All samples were below the analytical detection limit of 0.1ug/100 cm<sup>2</sup>. Samples were collected on horizontal surfaces from floor to ceiling. PDS beryllium laboratory sample data and location maps are contained in Attachment C, *Chemical Data Summaries and Sample Maps*.

**Room 240** of building 707 was listed on the Historical List of Rooms with potential beryllium contamination. The historical records indicate that the potential beryllium contamination was internal to the plenum and Zone 1 exhaust system. Both baseline and routine sampling of this room revealed no removable beryllium contamination outside of the exhaust system. Since the

baseline survey, the room has been stripped of internally contaminated beryllium contaminated systems. The final beryllium surveys for this area were collected on October 7, 2004. All samples were below the analytical detection limit of 0.1ug/100 cm<sup>2</sup>. Samples were collected on horizontal surfaces from floor to ceiling. PDS beryllium laboratory sample data and location maps are contained in Attachment C, *Chemical Data Summaries and Sample Maps*.

#### **4.3 RCRA/CERCLA Constituents [including metals and volatile organic compounds (VOCs)]**

There were no permitted Resource Conservation and Recovery Act (RCRA) container storage units or tanks on the second floor of Building 707. Based on a review of WEMS, Building 707 second floor historically contained five RCRA 90-day storage units and seventeen RCRA satellite storage areas. All were appropriately closed, and no evidence of releases from these units was observed. There were also three CERCLA remediation waste storage areas on the second floor, which have been appropriately closed.

A visual inspection of the second floor by 707 Environmental Compliance personnel verified that all hazardous wastes and chemicals have been removed, including gas cylinders, capacitors, batteries, mercury switches, poured lead piping joints, and chemicals that were previously stored in the building. Oil, water, kathene, and brine have been drained from the equipment that remains in the building. The majority of light bulbs and tubes have been removed; however, a small number of compact fluorescent bulbs in temporary lighting stringers will remain in the building until demolition, for safety purposes. Although these bulbs are hazardous for mercury, the small number left in the facility will not make the demolition debris hazardous waste.

Eleven paint samples were collected from several areas on the second floor, including filter units 21 and 25 interior and exterior surfaces, and kathabar units. (ref. sample ID. no. 03C0157, February 2003.) The lead levels ranged from 68 ppm to 11 weight percent. The specific filter units that were sampled have been removed, and the units that remain in the building were not sampled, although it is reasonable to assume that the remaining units do have lead-based paint. However, these are large pieces of equipment, and the paint comprises a small percentage of the overall waste stream, thus by mass balance, the equipment is not hazardous waste. Environmental Waste Compliance Guidance #27, *Lead-Based Paint (LBP) and LBP Debris Disposal*, states that LBP debris generated outside of currently identified high contamination areas shall be managed as non-hazardous (solid) waste and need not be sampled unless the potentially lead-containing component is to be scabbled or otherwise comprise a separate waste stream.

As a result of these observations it has been determined that no further sampling for RCRA/CERCLA constituents is required. All building demolition debris can be compliantly disposed as sanitary waste, with the exception of the PCB-contaminated vault roof, discussed below.

#### **4.4 Polychlorinated Biphenyls (PCBs)**

In 1991, one of the six transformers located on the roof of Building 707 was identified as leaking PCB oil. PCB contamination was also found in the downspout and soil below. A PCB cleanup was conducted on the roof in 1991 and soil remediation was completed in 1995. The B707 RLCR indicated that the PCB contamination on the roof had been remediated under the Toxic Substances Control Act (TSCA) regulations; however, the method used for verifying the contamination had been removed (swipe tests) is specifically excluded in the TSCA regulations for porous surfaces like concrete. The costs for TSCA compliant sampling is greater than the

cost of disposing of this portion of Building 707 as PCB remediation waste. The affected roof area will be marked as necessary to make it readily identifiable during demolition, so the waste can be segregated. This waste will be disposed of at a TSCA-regulated landfill. A contact record from D. Foss to E. Kray dated September 20, 2004, documents CDPHE's concurrence with this approach.

All PCB light ballasts have been removed from B707. No sampling has been conducted for PCBs in paint in B707. However, Environmental Waste Compliance Guidance #25, *Management of Polychlorinated Biphenyls (PCBs) in Paint and Other Bulk Product Waste During Facility Disposition*, states that applied dried paints are acceptable for disposal (with notification) in a non-hazardous solid waste landfill as PCB bulk product waste and need not be sampled.

#### 4.5 Freon

Various free standing units on the second floor contained freon, such as air conditioners and drinking fountains. The freon was drained from the equipment by a Colorado licensed refrigeration technician, and the equipment has been removed from the building.

#### 4.6 Physical hazards

Physical hazards associated with B707 consist of those common to standard industrial environments, and include hazards associated with energized systems, utilities, and trips and falls. There are no other unique hazards associated with the facility. The facility has been relatively well maintained and is in good physical condition, and therefore, does not present hazards associated with building deterioration.

Physical hazards are controlled by the Site Occupational Safety and Industrial Hygiene Program, which is based on OSHA regulations, DOE orders, and standard industry practices. A structural engineer will evaluate the structure prior to demolition as required by the B707 DOP, to assess any structural issues associated with the proposed demolition methods and sequence.

### 5 DATA QUALITY ASSESSMENT

Data used in making management decisions for decommissioning of B707 and consequent waste management is of adequate quality to support the decisions documented in this report. The data presented in this report (Attachments B1 through B26) were verified and validated relative to DOE quality requirements, applicable EPA guidance, and original project DQOs.

In summary, the Verification and Validation (V&V) process corroborates that the following elements of the characterization process are adequate:

- ◆ the *number* of samples and surveys;
- ◆ the *types* of samples and surveys;
- ◆ the sampling/survey process as implemented "in the field"; and
- ◆ the laboratory analytical process, relative to accuracy and precision considerations.

Details of the DQA are presented in Attachment D. The DQA Checklists are provided in the individual survey unit packages (located in the Building 707 Characterization Files).

The Minimum Detectable Activity (MDA) for each PDS instrument was determined *a priori* based on typical parameters (background, efficiency, and count time). A list of radiological field instrumentation and associated sensitivities is presented in Table 2.

## 6. INDEPENDENT VERIFICATION

Oak Ridge Institute for Science and Education (ORISE) has been contracted to perform an independent verification of the PDSP process and data collected in support of Final Survey of Building 707.

**Table 2**  
**PDS Radiological Field Instrumentation**  
**& Minimum Detectable Activities**

Model	Measurement Type	MDA (dpm/100 cm <sup>2</sup> )
NE Electra DP6	TSA	48
NE Electra AP6	Scan	300
Eberline SAC-4	Removable (Smears)	10
Bartlett FSM	Scan	300

## 7. DECOMMISSIONING WASTE TYPES AND VOLUME ESTIMATES

The demolition and disposal of B707 will generate a variety of wastes. All waste identified previously can be disposed of as sanitary waste.

## 8. FACILITY CLASSIFICATION AND CONCLUSIONS

Based upon the results of this PDSR, the 2<sup>nd</sup> floor and exterior surfaces of B707 meet the unrestricted release limits specified in the site Pre-Demolition Survey Plan and are ready for demolition. The PDS for the 2<sup>nd</sup> floor and exterior surfaces of B707 was performed in accordance with the DDCP and PDSP, all PDSP DQOs were met, and all data satisfied the PDSP DQA criteria. Environmental media beneath and surrounding the facilities will be addressed at a future date.

A facility walkdown and historical review indicates that no RCRA/CERCLA constituents exist on B707 structural surfaces, with the exceptions described above of PCBs on the vault roof and the compact fluorescent lights. The PCB portion of the vault roof will be disposed of at a TSCA landfill, and the rest of the building debris can be compliantly managed as sanitary waste.

Radiological contamination in excess of the PDSP Table 7-1 limits does not exist on the 2<sup>nd</sup> floor and exterior surfaces B707.

Based upon this PDSR, the 2<sup>nd</sup> floor and exterior surfaces B707 is acceptable to demolish, and the debris managed as sanitary waste. Under-slab utilities and piping systems shall be managed as radioactive waste, unless additional data collected prior to waste disposition proves otherwise. To ensure that the facility remains below the release levels and that PDS data remain valid, Level 2 isolation controls have been established, and the area posted accordingly.



## 9. REFERENCES

*Building 707 Closure Project Decommissioning Operations Plan*, Revision 0, December 21, 2000

Building 707 Reconnaissance Level Characterization Report, August 1, 2000

DOE Order 5400.5, *Radiation Protection of the Public and the Environment*

DOE Order 414.1A, *Quality Assurance*

MAN-131-QAPM, *Kaiser-Hill Team Quality Assurance Program*, Rev. 1, November 1, 2001.

MAN-076-FDPM, *Facility Disposition Program Manual*, Rev. 3, January 1, 2002.

MAN-077-DDCP, *Decontamination and Decommissioning Characterization Protocol*, Rev. 4, July 15, 2002.

MAN-127-PDSP, *Pre-Demolition Survey Plan for D&D Facilities*, Rev. 1, July 15, 2002.

MARSSIM - *Multi-Agency Radiation Survey and Site Investigation Manual* (NUREG-1575, EPA 402-R-97-016).

PRO-475-RSP-16.01, *Radiological Survey/Sampling Package Design, Preparation, Control, Implementation, and Closure*, Rev. 1, May 22, 2001.

PRO-476-RSP-16.02, *Pre-Demolition (Final Status) Radiological Surveys of Surfaces and Structures*, Rev. 2, March 10, 2003.

PRO-477-RSP-16.03, *Radiological Samples of Building Media*, Rev. 1, May 22, 2001.

PRO-478-RSP-16.04, *Radiological Survey/Sample Data Analysis for Final Status Survey*, Rev. 1, May 22, 2001.

PRO-479-RSP-16.05, *Radiological Survey/Sample Quality Control for Final Status Survey*, Rev. 1, May 22, 2001.

PRO-563-ACPR, *Asbestos Characterization Procedure*, Revision 0, August 24, 1999.

PRO-536-BCPR, *Beryllium Characterization Procedure*, Revision 0, August 24, 1999.

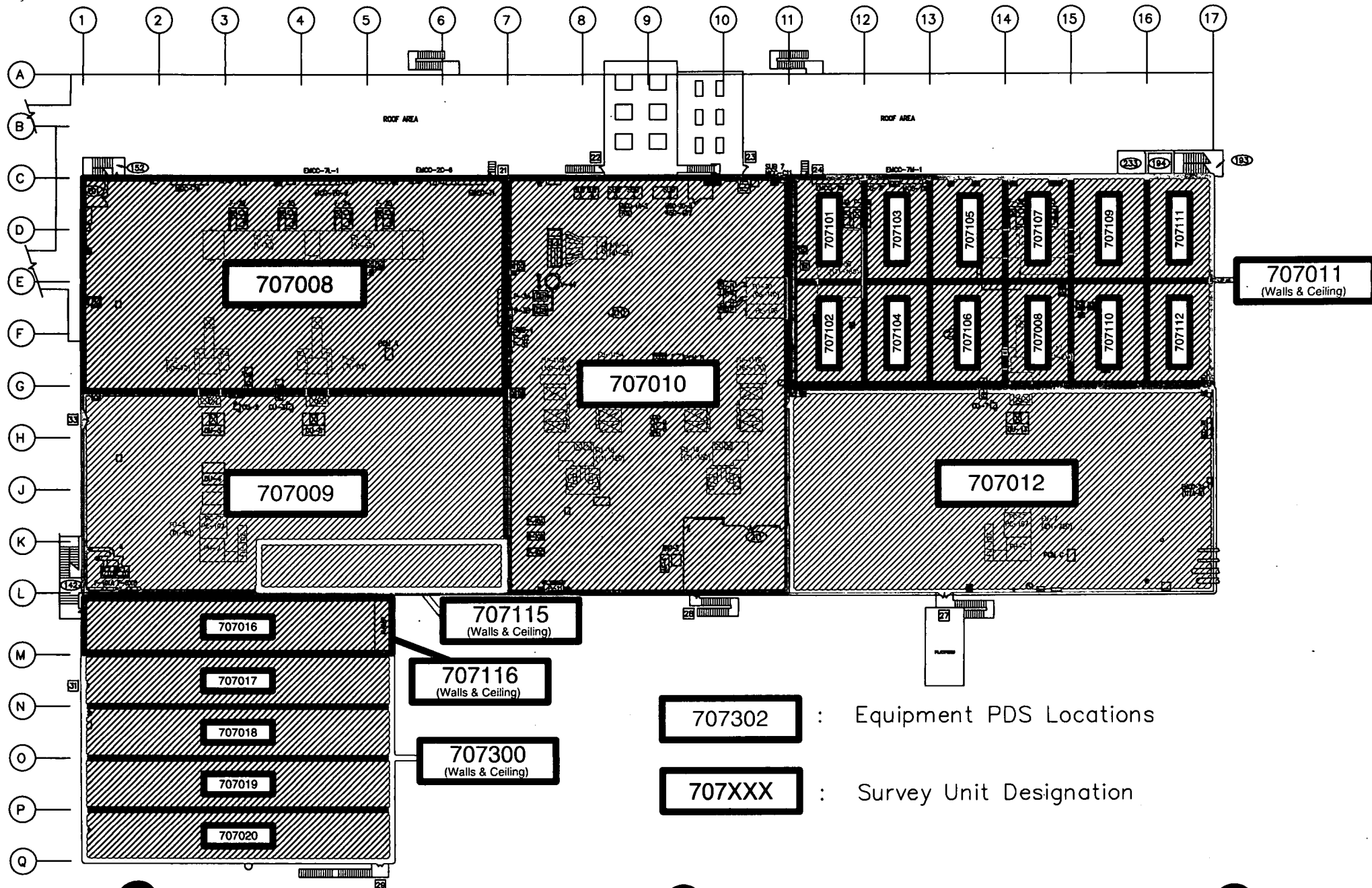
RFETS, *Environmental Waste Compliance Guidance #25, Management of Polychlorinated Biphenyls (PCBs) in Paint and Other Bulk Product Waste During Facility Disposition*, April 5, 1999.

RFETS, *Environmental Waste Compliance Guidance #27, Lead-Based Paint (LBP) and LBP Debris Disposal*, November 4, 2002

ATTACHMENT A

B 707 2<sup>nd</sup> Floor Main Building,  
2<sup>nd</sup> Floor Annex and  
Building Exterior Overview Map

# Building 707 Second Floor October 10, 2004



ATTACHMENT B1

Survey Unit 707008 Survey Data and Maps

# Investigation Documentation

Survey Unit 707008

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm/100 cm <sup>2</sup> )	Remediation Performed? (Yes/No)	"As Left" (dpm/100 cm <sup>2</sup> )	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	G7	565	112	518.5	Yes	37.0	Yes	28.0
2	Floor	F5	1234	410	1898.1	Yes	24.5	Yes	29.8
3	Floor	F5	680	116	537.0	Yes	25.0	Yes	20.5
4	Floor	E5	3280	652	3018.5	Yes	26.4	Yes	18.7
5	Floor	F5	790	158	731.5	Yes	6.0	Yes	25.1
6	Floor	G5	420	105	486.1	Yes	39.8	Yes	19.9
7	Floor	E5	3000	600	2777.8	Yes	27.8	Yes	26.7
8	Floor	E5	330	66.3	306.9	Yes	33.8	Yes	25.8
9	Floor	F3	500	100.7	466.2	Yes	31.0	Yes	22.6
10	Floor	D7	344	66.7	308.8	Yes	15.3	Yes	26.4
11	Floor	F3	300	44.7	206.9	Yes	188.4	Yes	36.0
1	Pad	D7	310	52	240.7	Yes	0.0	Yes	22.1
2	Pad	D9	216	43.3	200.5	Yes	40.3	Yes	20.4
3	Pad	D7	430	86	398.1	Yes	40.3	Yes	20.7
4	Pad	D7	620	124	574.1	Yes	15.3	Yes	3.8
5	Pad	D7	243	48.7	225.5	Yes	18.5	Yes	17.0
6	Pad	D7	300	50	231.5	Yes	0.0	Yes	13.3
1	Equipment	E3	189.8	N/A	N/A	Yes	43.0	Yes	12.9
2	Equipment	E3	509.3	N/A	N/A	Yes	31.0	Yes	17.4

Maximum

188.4

36.0

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 16

Nbr Biased Measurements Required: 40

Nbr QC Required: 6

Nbr Random Measurements Performed: 16

Nbr Biased Measurements Performed: 40

Nbr QC Performed: 6

#### Alpha

Maximum: 91.9 dpm/100cm<sup>2</sup>  
Minimum: -9.3 dpm/100cm<sup>2</sup>  
Mean: 22.6 dpm/100cm<sup>2</sup>  
Standard Deviation: 19.7  
QC Maximum: 47.2 dpm/100cm<sup>2</sup>  
QC Minimum: -4.9 dpm/100cm<sup>2</sup>  
QC Mean: 18.5 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 16

Nbr Biased Measurements Required: 40

Nbr Random Measurements Performed: 16

Nbr Biased Measurements Performed: 40

#### Alpha

Maximum: 9.0 dpm/100cm<sup>2</sup>  
Minimum: -0.9 dpm/100cm<sup>2</sup>  
Mean: 0.9 dpm/100cm<sup>2</sup>  
Standard Deviation: 1.6  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 12

Nbr Biased Required: 0

Nbr Random Collected: 12

Nbr Biased Collected: 0

#### Uranium

Maximum: 92 dpm/100cm<sup>2</sup>  
Minimum: 3 dpm/100cm<sup>2</sup>  
Mean: 36 dpm/100cm<sup>2</sup>  
Standard Deviation: 26  
Uranium DCGL<sub>w</sub>: 5,000 dpm/100cm<sup>2</sup>  
Uranium DCGL<sub>EMC</sub>: 15,000 dpm/100cm<sup>2</sup>

#### Transuranic

Maximum: 39 dpm/100cm<sup>2</sup>  
Minimum: 0 dpm/100cm<sup>2</sup>  
Mean: 6 dpm/100cm<sup>2</sup>  
Standard Deviation: 11  
Transuranic DCGL<sub>w</sub>: 100 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300 dpm/100cm<sup>2</sup>

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Printed On: 10/16/04 12:35

Page: 1 of 10

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	511510	08/27/04	Electra	1384	DP-6	01/16/05	0.216	NA	48.0	NA	T/S
2	511510	08/27/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
3	513731	08/27/04	Electra	2335	DP-6	10/19/04	0.217	NA	48.0	NA	T/S
4	513731	08/29/04	Electra	4397	DP-6	09/17/04	0.202	NA	48.0	NA	T/S
5	511510	08/29/04	Electra	2124	DP-6	11/18/04	0.214	NA	48.0	NA	T/S
6	511510	08/29/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
7	513185	10/06/04	Electra	1826	DP-6	03/20/05	0.227	NA	48.0	NA	T/S
8	514510	10/06/04	SAC-4	1471	NA	02/28/05	0.333	NA	10.0	NA	R
9	514510	10/08/04	Electra	3977	DP-6	01/31/05	0.213	NA	48.0	48.0	I

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

26

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707008PRP-N001	2	0.0	N/A	
707008PRP-N002	2	0.0	N/A	
707008PRP-N003	2	0.0	N/A	
707008PRP-N004	2	0.0	N/A	
707008PRP-N005	2	1.5	N/A	
707008PRP-N006	2	0.0	N/A	
707008PRP-N007	2	1.5	N/A	
707008PRP-N008	2	0.0	N/A	
707008PRP-N009	2	0.0	N/A	
707008PRP-N010	2	0.0	N/A	
707008PRP-N011	2	0.0	N/A	
707008PRP-N012	2	0.0	N/A	
707008PRP-N013	2	1.5	N/A	
707008PRP-N014	8	-0.9	N/A	
707008PRP-N015	8	0.6	N/A	
707008PRP-N016	8	0.6	N/A	



Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

## Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707008PBP-N017	2	9.0	N/A	
707008PBP-N018	2	0.0	N/A	
707008PBP-N019	2	1.5	N/A	
707008PBP-N020	2	3.0	N/A	
707008PBP-N021	2	1.5	N/A	
707008PBP-N022	2	1.5	N/A	
707008PBP-N023	2	0.0	N/A	
707008PBP-N024	2	0.0	N/A	
707008PBP-N025	2	1.5	N/A	
707008PBP-N026	2	1.5	N/A	
707008PBP-N027	2	0.0	N/A	
707008PBP-N028	6	-0.3	N/A	
707008PBP-N029	6	1.2	N/A	
707008PBP-N030	6	-0.3	N/A	
707008PBP-N031	6	1.2	N/A	
707008PBP-N032	6	1.2	N/A	
707008PBP-N033	2	0.0	N/A	
707008PBP-N034	2	0.0	N/A	
707008PBP-N035	2	1.5	N/A	
707008PBP-N036	2	1.5	N/A	
707008PBP-N037	2	0.0	N/A	
707008PBP-N038	2	0.0	N/A	
707008PBP-N039	2	6.0	N/A	
707008PBP-N040	2	0.0	N/A	
707008PBP-N041	2	0.0	N/A	
707008PBP-N042	2	1.5	N/A	
707008PBP-N043	6	-0.3	N/A	

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707008PBP-N044	6	-0.3	N/A	
707008PBP-N045	6	1.2	N/A	
707008PBP-N046	6	-0.3	N/A	
707008PBP-N047	6	1.2	N/A	
707008PBP-N048	6	1.2	N/A	
707008PBP-N049	6	-0.3	N/A	
707008PBP-N050	6	4.2	N/A	
707008PBP-N051	6	1.2	N/A	
707008PBP-N052	6	-0.3	N/A	
707008PBP-N053	6	1.2	N/A	
707008PBP-N054	6	2.7	N/A	
707008PBP-N055	6	-0.3	N/A	
707008PBP-N056	6	-0.3	N/A	

Comments:

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707008PRP-N001	1	21.1	N/A	
707008PRP-N002	1	11.8	N/A	
707008PRP-N003	1	48.8	N/A	
707008QRP-N003	3	30.6	N/A	
707008PRP-N004	1	9.0	N/A	
707008PRP-N005	1	24.3	N/A	
707008PRP-N006	1	27.5	N/A	
707008PRP-N007	1	18.3	N/A	
707008PRP-N008	1	9.0	N/A	
707008PRP-N009	1	18.3	N/A	
707008PRP-N010	1	24.3	N/A	
707008PRP-N011	1	7.2	N/A	
707008PRP-N012	1	2.5	N/A	
707008PRP-N013	1	18.3	N/A	
707008PRP-N014	7	13.2	N/A	
707008PRP-N015	7	7.5	N/A	
707008PRP-N016	7	-1.3	N/A	
707008QRP-N017	3	16.8	N/A	
707008QRP-N023	3	4.3	N/A	
707008QRP-N033	3	16.8	N/A	
707008QRP-N035	3	47.2	N/A	
707008QRP-N042	3	-4.9	N/A	

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707 2nd floor, room 200, east quadrant

## Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707008PBP-N017	1	15.3	N/A	
707008PBP-N018	1	9.3	N/A	
707008PBP-N019	1	9.3	N/A	
707008PBP-N020	1	12.5	N/A	
707008PBP-N021	1	6.0	N/A	
707008PBP-N022	1	3.3	N/A	
707008PBP-N023	1	-3.2	N/A	
707008PBP-N024	1	24.6	N/A	
707008PBP-N025	1	18.5	N/A	
707008PBP-N026	1	21.8	N/A	
707008PBP-N027	1	33.8	N/A	
707008PBP-N028	5	46.9	N/A	
707008PBP-N029	5	43.6	N/A	
707008PBP-N030	5	22.2	N/A	
707008PBP-N031	5	23.6	N/A	
707008PBP-N032	5	28.2	N/A	
707008PBP-N033	3	33.6	N/A	
707008PBP-N034	3	13.8	N/A	
707008SBP-N035	9	9.0	N/A	
707008PBP-N036	3	29.0	N/A	
707008PBP-N037	3	-9.3	N/A	
707008PBP-N038	3	23.0	N/A	
707008PBP-N039	3	15.1	N/A	
707008PBP-N040	3	4.5	N/A	
707008PBP-N041	3	13.8	N/A	
707008PBP-N042	3	-3.3	N/A	
707008PBP-N043	4	31.0	N/A	

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707008PBP-N044	4	37.4	N/A	
707008PBP-N045	4	60.7	N/A	
707008PBP-N046	4	91.9	N/A	
707008PBP-N047	4	32.5	N/A	
707008PBP-N048	4	37.4	N/A	
707008PBP-N049	4	17.6	N/A	
707008PBP-N050	4	55.8	N/A	
707008PBP-N051	5	9.5	N/A	
707008PBP-N052	5	22.2	N/A	
707008PBP-N053	5	32.9	N/A	
707008PBP-N054	5	9.5	N/A	
707008PBP-N055	5	87.6	N/A	
707008PBP-N056	5	37.6	N/A	

**Comments:** 100% scan was performed on the floors, 25% scan was performed on the lower walls, and >10% scan was performed on the overhead surfaces. All values <300 dpm/100cm<sup>2</sup>.

32

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
001.001 1 Floor	U234	0.6190	0.1510	5.38	24.0	5	1	Uranium 10 Transuranic 0
	U235	0.0370	0.1510			0	1	
	U238	0.5950	0.1510			5	1	
	Pu239/240	0.0000	0.0710			0	1	
	Am241	0.0180	0.1420			0	1	
002.001 2 Floor	U234	1.0100	0.2200	9.63	24.0	14	3	Uranium 25 Transuranic 1
	U235	0.1210	0.1690			2	2	
	U238	0.6460	0.1570			9	2	
	Pu239/240	0.0630	0.1940			1	3	
	Am241	0.0000	0.1520			0	2	
003.001 3 Floor	U234	1.1000	0.1300	16.10	24.0	25	3	Uranium 47 Transuranic 2
	U235	0.0900	0.1450			2	3	
	U238	0.8410	0.1450			19	3	
	Pu239/240	0.0150	0.1560			0	4	
	Am241	0.0570	0.1410			1	3	
004.001 4 Floor	U234	1.0200	0.2060	15.42	24.0	23	5	Uranium 40 Transuranic 1
	U235	0.1590	0.2450			4	5	
	U238	0.6410	0.1260			14	3	
	Pu239/240	0.0000	0.1870			0	4	
	Am241	0.0620	0.1520			1	3	
005.001 5 Floor	U234	0.6050	0.1890	16.32	24.0	14	4	Uranium 33 Transuranic 2
	U235	0.2530	0.1890			6	4	
	U238	0.5370	0.1430			13	3	
	Pu239/240	0.0060	0.1370			0	3	
	Am241	0.0930	0.0700			2	2	
006.001 6 Floor	U234	0.8380	0.2000	12.64	24.0	15	4	Uranium 29 Transuranic 11
	U235	0.1030	0.2490			2	5	
	U238	0.6660	0.2330			12	4	
	Pu239/240	0.5010	0.2010			9	4	
	Am241	0.0800	0.2300			1	4	
007.001 7 Floor	U234	1.0500	0.2330	18.93	24.0	29	6	Uranium 52 Transuranic 0
	U235	0.1980	0.1890			5	5	
	U238	0.6660	0.2330			18	6	
	Pu239/240	0.0000	0.2010			0	6	
	Am241	0.0000	0.2610			0	7	

Comments:

Survey Area: B

Survey Unit: 707008

Building: 707

Description: B707, 2nd floor, room 200, east quadrant

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
008.001 8 Floor	U234	1.6800	0.7430	23.29	24.0	56	25	Uranium 92 Transuranic 39
	U235	0.1970	0.2960			7	10	
	U238	0.8620	0.5190			29	17	
	Pu239/240	0.0360	0.2760			1	9	
	Am241	1.1400	0.2440			38	8	
010.001 10 Wall	U234	0.1630	0.2040	6.24	24.0	2	2	Uranium 3 Transuranic 1
	U235	0.0320	0.1300			0	1	
	U238	0.1150	0.1290			1	1	
	Pu239/240	0.0110	0.1320			0	1	
	Am241	0.0450	0.1860			0	2	
011.001 11 Floor	U234	0.4900	0.3800	26.90	24.0	19	15	Uranium 54 Transuranic 6
	U235	0.0660	0.2290			3	9	
	U238	0.8430	0.1450			33	6	
	Pu239/240	0.0640	0.1220			3	5	
	Am241	0.0800	0.1990			3	8	
012.001 12 Wall	U234	0.3690	0.1780	8.80	24.0	5	2	Uranium 9 Transuranic 1
	U235	0.1780	0.1780			2	2	
	U238	0.1600	0.1520			2	2	
	Pu239/240	0.0000	0.1010			0	1	
	Am241	0.0600	0.1830			1	2	

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707008

Classification: 2

Building: 707

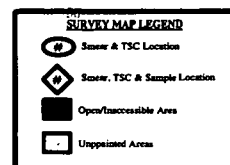
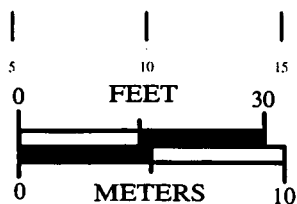
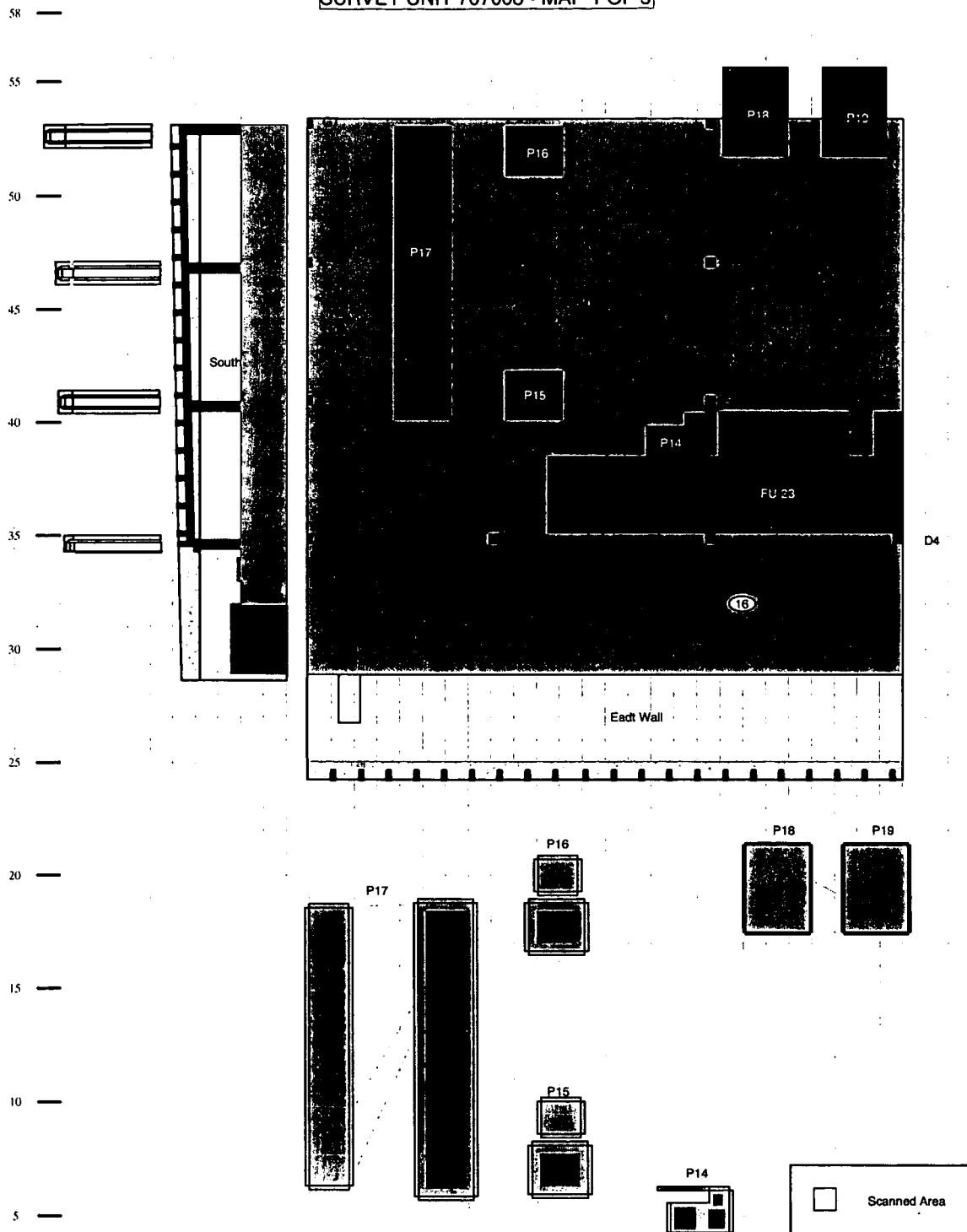
Survey Unit Description: Room 200 (east side)

Total Floor Area: 1058 sq. m

Total Area: 3990 sq. m

Grid Size: 15m x 15m

## SURVEY UNIT 707008 - MAP 1 OF 5



35



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707008

Classification: 2

Building: 707

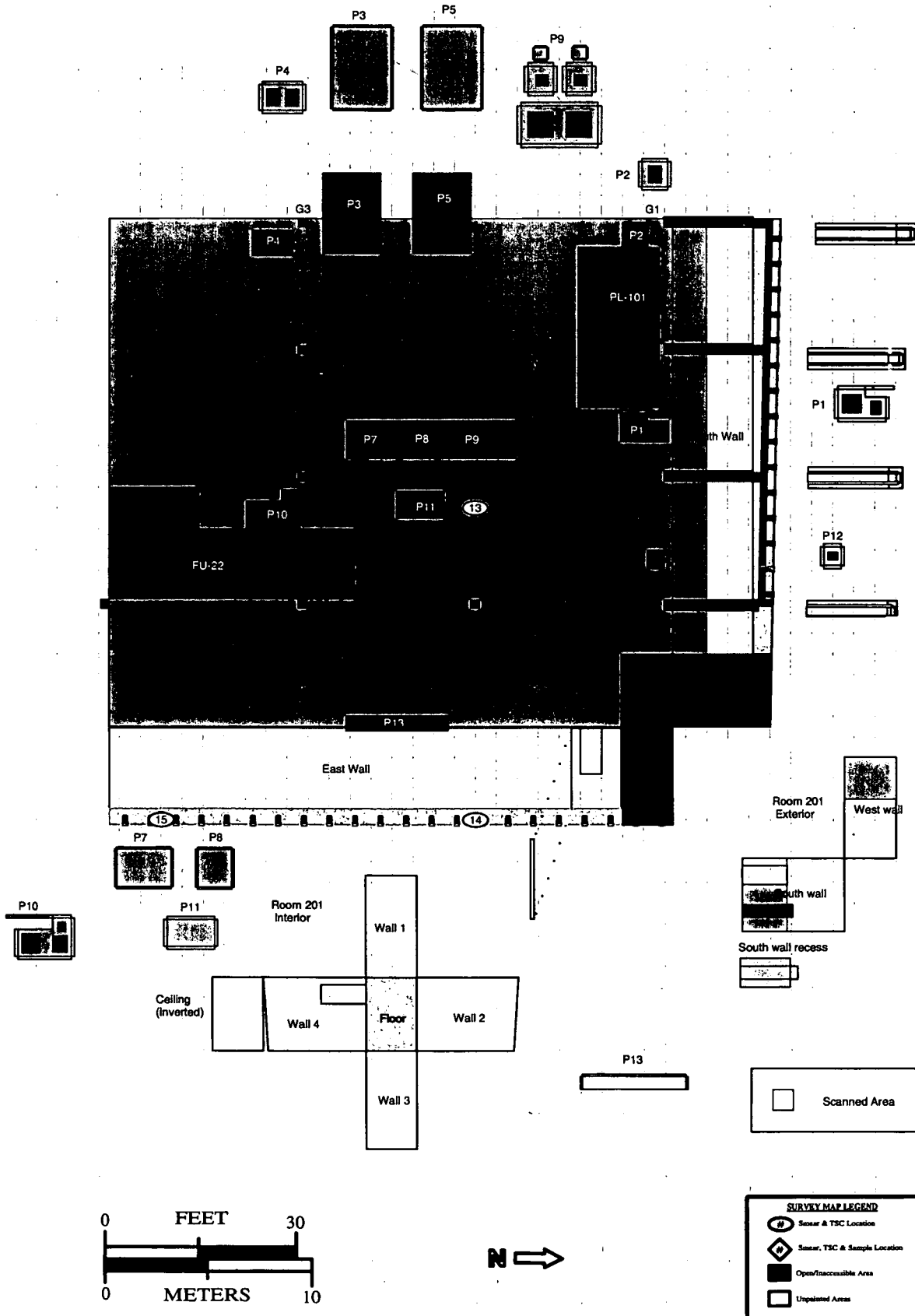
Survey Unit Description: Room 200 (east side)

Total Floor Area: 1058 sq. m

Total Area: 3990 sq. m

Grid Size: 15m x 15m

## **SURVEY UNIT 707008 - MAP 2 OF 5**



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707008

Classification: 2

Building: 707

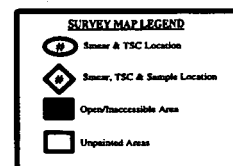
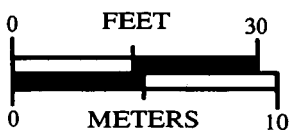
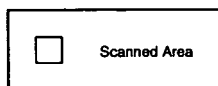
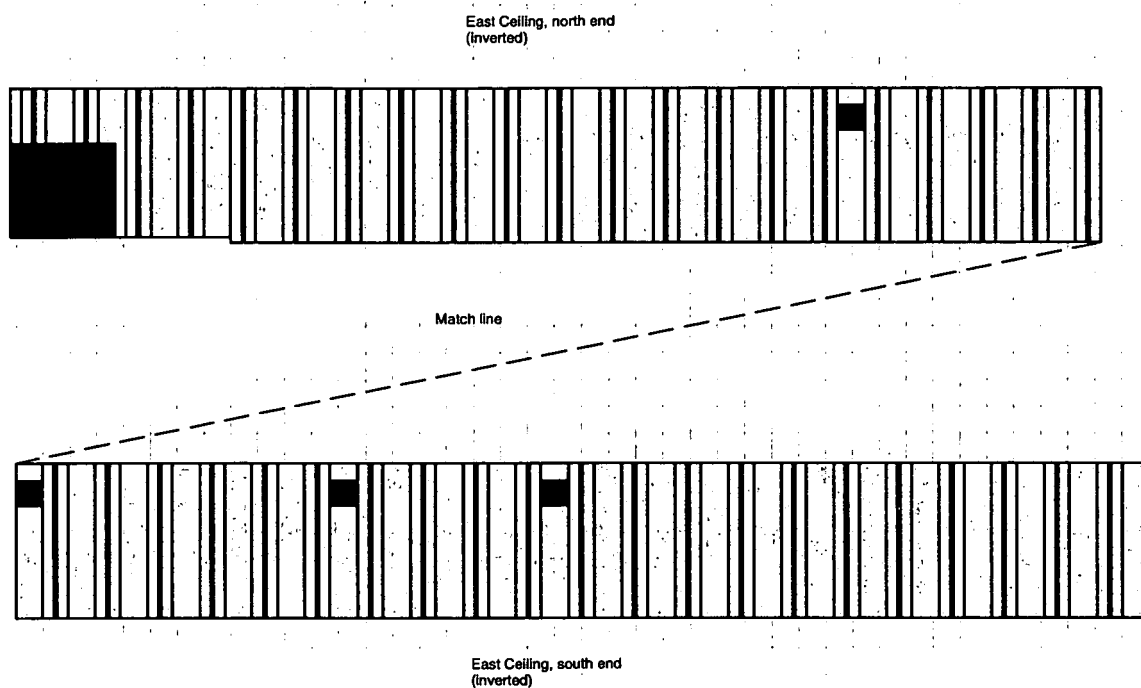
Survey Unit Description: Room 200 (east side)

Total Floor Area: 1058 sq. m

Total Area: 3990 sq. m

Grid Size: 15m x 15m

## SURVEY UNIT 707008 - MAP 3 OF 5



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707008

Classification: 2

Building: 707

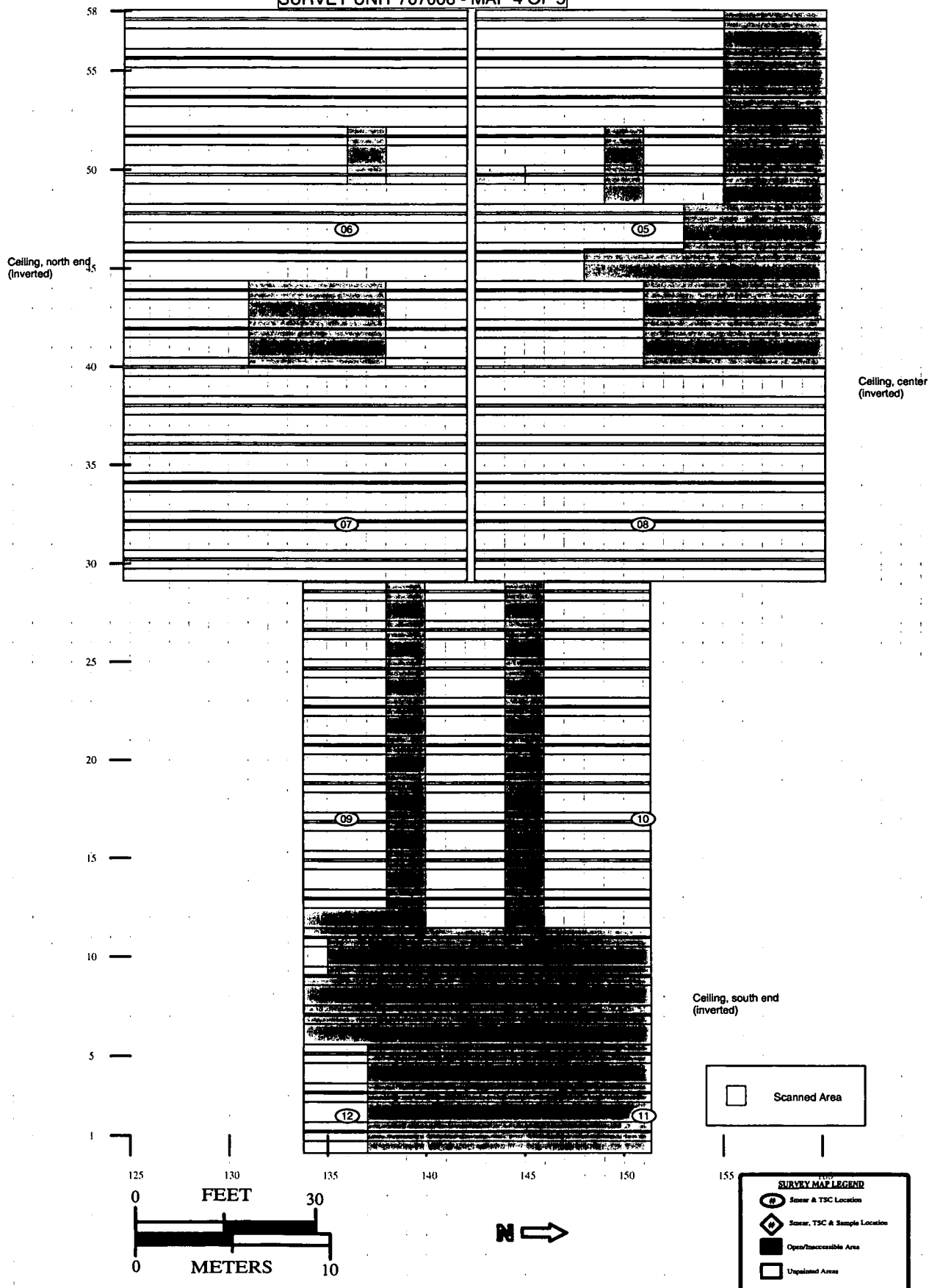
Survey Unit Description: Room 200 (east side)

Total Floor Area: 1058 sq. m

Total Area: 3990 sq. m

Grid Size: 15m x 15m

**SURVEY UNIT 707008 - MAP 4 OF 5**



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707008

Classification: 2

Building: 707

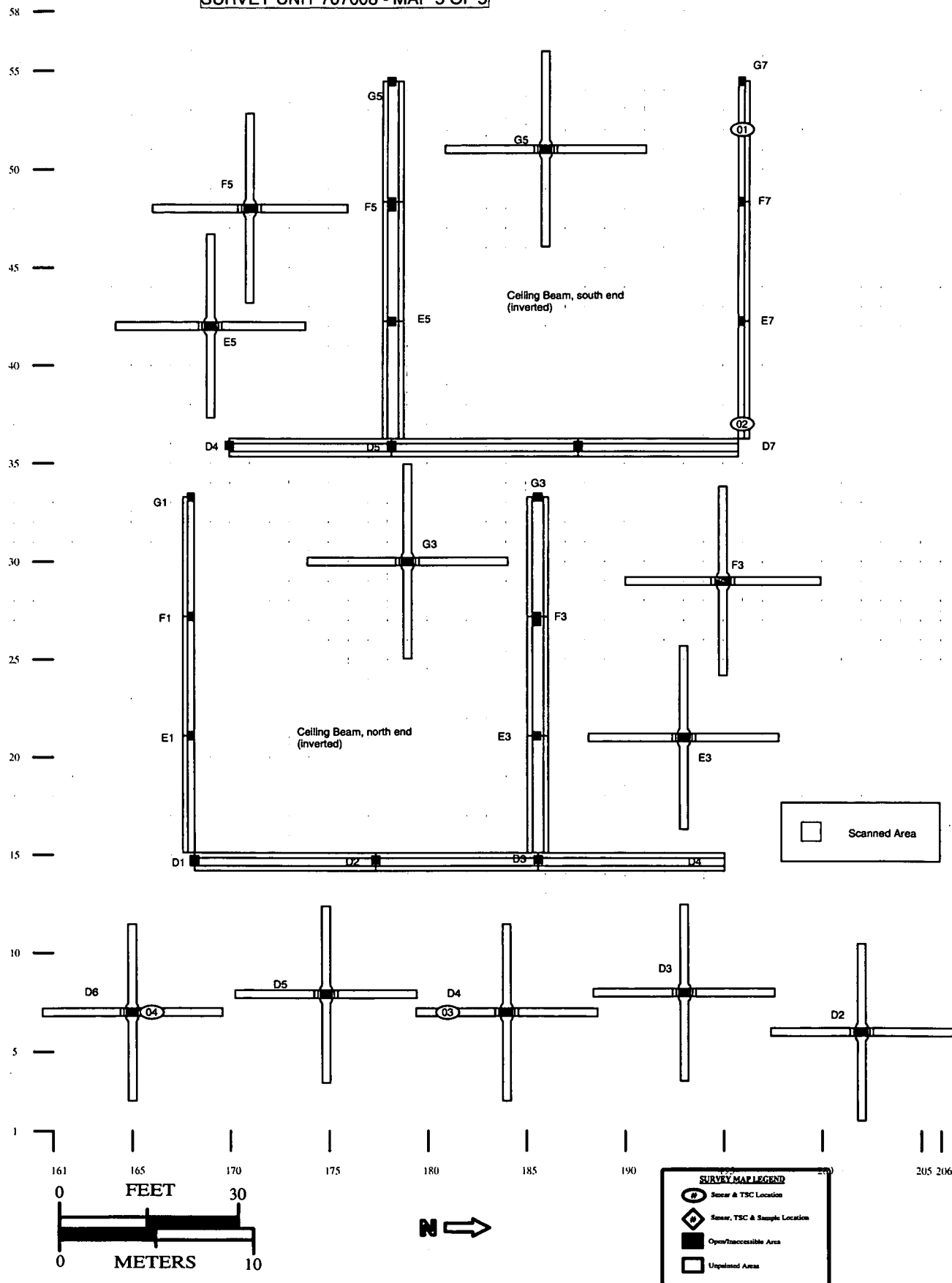
Survey Unit Description: Room 200 (east side)

Total Floor Area: 1058 sq. m

Total Area: 3990 sq. m

Grid Size: 15m x 15m

## SURVEY UNIT 707008 - MAP 5 OF 5



ATTACHMENT B2

Survey Unit 707009 Survey Data and Maps

# Investigation Documentation

Survey Unit 707009

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm/100 cm <sup>2</sup> )	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)
1	Floor	K2	797	159	723	Yes	169	No
2	Floor	K2	3657	N/A	3693	Yes	143	No
3	Floor	K1	659	142.3	647	Yes	240	No
4	Floor	K1	1330	327	1486	Yes	169	No
5	Floor	K1	648	133.7	608	Yes	78	No
6	Floor	J2	432	122.3	556	Yes	136	No
7	Floor	K2	1027	432.7	1967	Yes	117	No
8	Floor	K2	473	81.3	370	Yes	234	No
9	Floor	K2	2542	545.7	2480	Yes	84	No
10	Floor	K2	1150	466	2118	Yes	110	No
11	Floor	J2	582	93.3	424	Yes	130	No
12	Floor	J2	477	99.7	453	Yes	156	No
13	Floor	H2	14597	2933	13332	Yes	104	No
14	Floor	J2	47568	10100	45909	Yes	286	No
15	Floor	J2	477	178.3	810	Yes	221	No
16	Floor	J2	548	153.7	699	Yes	162	No
17	Floor	J2	726	256.3	1165	Yes	214	No
18	Floor	J3	462	84	382	Yes	226	No
19	Floor	H3	460	82.7	376	Yes	182	No
20	Floor	H3	579	162.7	740	Yes	162	No
21	Floor	H3	436	113.3	515	Yes	234	No
22	Floor	H5	815	174.7	794	Yes	149	No
23	Floor	H5	386	147.7	671	Yes	195	No
24	Floor	K6	350	57.4	261	Yes	Removed	No
25	Floor	K6	700	96.3	438	Yes	Removed	No
26	Floor	K6	400	60	273	Yes	Removed	No
27	Floor	K6	2500	485.3	2206	Yes	Removed	No
28	Floor	K6	1100	265	1205	Yes	Removed	No
29	Floor	K6	400	95.4	434	Yes	Removed	No
30	Floor	K6	750	123	559	Yes	Removed	No
31	Floor	K6	350	61	277	Yes	Removed	No
32	Floor	G5	60000	N/A	63600	Yes	88	No
33	Floor	G5	660	613	2786	Yes	234	No
34	Floor	G5	21000	N/A	19931	Yes	279	No
35	Floor	G5	1800	N/A	1878	Yes	157	No
36	Floor	G5	1200	N/A	1439.7	Yes	145	No
37	Floor	G5	600	N/A	601	Yes	164	No
38	Floor	G5	752	148.3	674	Yes	266	No
39	Floor	H6	733	118.7	540	Yes	136	No
40	Floor	J1	350	64	291	Yes	149	No
41	Floor	J1	300	48	218	Yes	94	No
42	Floor	J2	1500	281	1277	Yes	227	No
43	Floor	J2	150	26	118	Yes	266	No
44	Floor	K3	325	60.7	276	Yes	260	No
45	Floor	K3	625	124	564	Yes	41	No

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum = 286

# Investigation Documentation

Survey Unit 707009

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm/100 cm <sup>2</sup> )	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)
1	Pads	J7	450	83.3	370	Yes	3	Yes
2	Pads	K6	410	75.3	342	Yes	182	Yes
3	Pads	K6	300	76.7	349	Yes	Removed	No
4	Pads	K6	760	149.7	680	Yes	45	Yes
5	Pads	K6	320	62	282	Yes	3	Yes
6	Pads	K6	3120	55.4	2805	Yes	Removed	No
7	Pads	K6	1340	264.7	1203	Yes	76	Yes
8	Pads	H5	1540	304.3	1383	Yes	12	Yes
9	Pads	H3	200	33.3	151	Yes	61	Yes
10	Pads	H2	245	41.4	188	Yes	9	Yes
11	Pads	H3	500	106.7	485	Yes	24	Yes
12	Pads	G6	270	48	218	Yes	9	Yes
13	Pads	J3	450	81.3	370	Yes	30	Yes
14	Pads	J2	1965	385	1750	Yes	52	Yes
15	Pads	J2	1355	264.3	1201	Yes	18	Yes
16	Pads	J2	7530	1499.3	6815	Yes	45	Yes
17	Pads	J2	200	37.6	171	Yes	21	Yes
18	Pads	J2	200	33.7	153	Yes	55	Yes
19	Pads	K2	7069	1405.3	6388	Yes	49	Yes
20	Pads	K2	385	70.7	321	Yes	15	Yes
21	Pads	K6	384	67.4	306	Yes	182	Yes
22	Pads	K6	210	40	182	No	N/A	No
23	Pads	K6	660	110.3	501	Yes	12	Yes
24	Pads	H3	115	20.6	94	Yes	94	Yes
25	Pads	J3	400	74	336	Yes	79	Yes
26	Pads	K2	125	22	100	Yes	100	Yes
27	Pads	J2	215	36	164	Yes	164	Yes
28	Pads	K6	800	56	255	Yes	151	Yes
29	Pads	K6	1014	332.3	1510	Yes	18	Yes
30	Pads	K6	604	99.7	453	Yes	42	Yes
31	Pads	K6	400	68.7	312	Yes	34	Yes
32	Pads	K5	496	105	477	Yes	27	Yes
33	Pads	K6	390	107	486	Yes	151	Yes
34	Pads	K6	200	33.3	151	No	N/A	No

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum = 182

4/2

Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor room 200 west side

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 16

Nbr Biased Measurements Required: 40

Nbr QC Required: 6

Nbr Random Measurements Performed: 16

Nbr Biased Measurements Performed: 40

Nbr QC Performed: 6

#### Alpha

Maximum: 81.8 dpm/100cm<sup>2</sup>Minimum: -0.8 dpm/100cm<sup>2</sup>Mean: 27.3 dpm/100cm<sup>2</sup>

Standard Deviation: 22.2

QC Maximum: 30.8 dpm/100cm<sup>2</sup>QC Minimum: -0.1 dpm/100cm<sup>2</sup>QC Mean: 20.8 dpm/100cm<sup>2</sup>Transuranic DCGLW: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 16

Nbr Biased Measurements Required: 40

Nbr Random Measurements Performed: 16

Nbr Biased Measurements Performed: 40

#### Alpha

Maximum: 15.0 dpm/100cm<sup>2</sup>Minimum: 0.0 dpm/100cm<sup>2</sup>Mean: 2.3 dpm/100cm<sup>2</sup>

Standard Deviation: 3.2

Transuranic DCGLW: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 14

Nbr Biased Required: 0

Nbr Random Collected: 14

Nbr Biased Collected: 0

#### Uranium

Maximum: NA dpm/100cm<sup>2</sup>Minimum: NA dpm/100cm<sup>2</sup>Mean: NA dpm/100cm<sup>2</sup>

Standard Deviation: NA

Uranium DCGLW: 5,000 dpm/100cm<sup>2</sup>Uranium DCGL<sub>EMC</sub>: 15,000 dpm/100cm<sup>2</sup>

#### Transuranic

Maximum: 78 dpm/100cm<sup>2</sup>Minimum: 0 dpm/100cm<sup>2</sup>Mean: 10 dpm/100cm<sup>2</sup>

Standard Deviation: 20

Transuranic DCGLW: 100 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300 dpm/100cm<sup>2</sup>

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.



Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	511510	08/30/04	Electra	1384	DP-6	01/16/05	0.216	NA	48.0	NA	T/S
2	513731	08/30/04	Electra	2124	DP-6	11/18/04	0.214	NA	48.0	NA	T/S
3	511510	08/30/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
4	511510	08/31/04	Electra	2124	DP-6	11/18/04	0.214	NA	48.0	NA	T/S
5	511510	08/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
6	509552	09/08/04	Electra	1384	DP-6	01/16/05	0.216	NA	48.0	NA	T/S
7	511510	09/08/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
8	509552	09/08/04	Electra	2138	DP-6	02/25/05	0.222	NA	48.0	NA	T/S
9	509552	09/09/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
10	511510	09/09/04	Electra	2138	DP-6	02/25/05	0.222	NA	48.0	NA	T/S
11	509552	09/10/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
12	511510	09/10/04	Electra	2138	DP-6	02/25/05	0.222	NA	48.0	NA	T/S
13	513185	10/06/04	Electra	1826	DP-6	03/20/05	0.227	NA	48.0	NA	T
	514510	10/06/04	SAC-4	1471	NA	02/28/05	0.333	NA	10.0	NA	R
15	511798	10/09/04	Electra	3973	DP-6	12/22/04	0.216	NA	48.0	NA	Q
16	516375	10/09/04	Electra	1245	DP-6	02/23/05	0.285	NA	48.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

44

Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707009PRP-N001	3	0.0	N/A	
707009PRP-N002	3	0.0	N/A	
707009PRP-N003	3	0.0	N/A	
707009PRP-N004	3	1.5	N/A	
707009PRP-N005	3	0.0	N/A	
707009PRP-N006	3	1.5	N/A	
707009PRP-N007	14	0.0	N/A	
707009PRP-N008	14	0.0	N/A	
707009PRP-N009	5	1.5	N/A	
707009PRP-N010	14	3.0	N/A	
707009PRP-N011	14	1.5	N/A	
707009PRP-N012	14	0.0	N/A	
707009PRP-N013	14	0.0	N/A	
707009PRP-N014	5	0.0	N/A	
707009PRP-N015	5	0.0	N/A	
707009PRP-N016	5	1.5	N/A	

45

Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707009PBP-N017	3	3.0	N/A	
707009PBP-N018	3	0.0	N/A	
707009PBP-N019	3	0.0	N/A	
707009PBP-N020	7	12.0	N/A	
707009PBP-N021	7	4.5	N/A	
707009PBP-N022	7	6.0	N/A	
707009PBP-N023	7	3.0	N/A	
707009PBP-N024	7	12.0	N/A	
707009PBP-N025	7	6.0	N/A	
707009PBP-N026	9	15.0	N/A	
707009PBP-N027	9	6.0	N/A	
707009PBP-N028	9	1.5	N/A	
707009PBP-N029	9	1.5	N/A	
707009PBP-N030	7	3.0	N/A	
707009PBP-N031	7	4.5	N/A	
707009PBP-N032	7	1.5	N/A	
707009PBP-N033	7	1.5	N/A	
707009PBP-N034	7	3.0	N/A	
707009PBP-N035	7	1.5	N/A	
707009PBP-N036	7	4.5	N/A	
707009PBP-N037	7	1.5	N/A	
707009PBP-N038	7	1.5	N/A	
707009PBP-N039	7	9.0	N/A	
707009PBP-N040	7	1.5	N/A	
707009PBP-N041	7	0.0	N/A	
707009PBP-N042	7	0.0	N/A	
707009PBP-N043	7	0.0	N/A	

Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707009PBP-N044	7	0.0	N/A	
707009PBP-N045	7	3.0	N/A	
707009PBP-N046	7	0.0	N/A	
707009PBP-N047	7	1.5	N/A	
707009PBP-N048	9	3.0	N/A	
707009PBP-N049	9	0.0	N/A	
707009PBP-N050	9	1.5	N/A	
707009PBP-N051	9	1.5	N/A	
707009PBP-N052	9	0.0	N/A	
707009PBP-N053	11	0.0	N/A	
707009PBP-N054	11	0.0	N/A	
707009PBP-N055	11	3.0	N/A	
707009PBP-N056	11	0.0	N/A	

Comments:

Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707009PRP-N001	1	5.2	N/A	
707009QRP-N001	16	23.4	N/A	
707009PRP-N002	1	-0.8	N/A	
707009PRP-N003	1	20.5	N/A	
707009QRP-N003	16	28.0	N/A	
707009PRP-N004	1	14.4	N/A	
707009PRP-N005	1	5.2	N/A	
707009PRP-N006	1	5.2	N/A	
707009QRP-N006	15	30.8	N/A	
707009PRP-N007	13	18.4	N/A	
707009PRP-N008	13	9.6	N/A	
707009PRP-N009	4	42.8	N/A	
707009PRP-N010	13	0.7	N/A	
707009PRP-N011	13	21.5	N/A	
707009PRP-N012	13	6.9	N/A	
707009PRP-N013	13	12.6	N/A	
707009PRP-N014	4	30.2	N/A	
707009PRP-N015	4	27.4	N/A	
707009PRP-N016	4	11.5	N/A	
707009QRP-N028	15	24.4	N/A	
707009QRP-N040	15	18.3	N/A	
707009QRP-N041	16	-0.1	N/A	

Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

## Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707009SBP-N017	13	16.3	N/A	
707009PBP-N018	2	54.2	N/A	
707009SBP-N019	13	20.6	N/A	
707009PBP-N020	6	76.7	N/A	
707009PBP-N021	6	52.2	N/A	
707009PBP-N022	6	70.7	N/A	
707009PBP-N023	6	39.7	N/A	
707009PBP-N024	6	76.7	N/A	
707009SBP-N025	13	37.1	N/A	
707009PBP-N026	10	80.0	N/A	
707009PBP-N027	10	81.8	N/A	
707009PBP-N028	10	17.0	N/A	
707009PBP-N029	10	29.1	N/A	
707009PBP-N030	6	8.6	N/A	
707009SBP-N031	13	18.6	N/A	
707009PBP-N032	6	30.4	N/A	
707009SBP-N033	13	24.2	N/A	
707009PBP-N034	6	31.8	N/A	
707009PBP-N035	6	52.2	N/A	
707009SBP-N036	13	29.1	N/A	
707009PBP-N037	6	8.6	N/A	
707009PBP-N038	6	15.1	N/A	
707009PBP-N039	6	15.1	N/A	
707009PBP-N040	6	2.6	N/A	
707009PBP-N041	6	30.4	N/A	
707009PBP-N042	6	17.9	N/A	
707009PBP-N043	6	17.9	N/A	

Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707009PBP-N044	6	-0.6	N/A	
707009PBP-N045	6	15.1	N/A	
707009PBP-N046	6	5.9	N/A	
707009SBP-N047	13	10.7	N/A	
707009PBP-N048	10	71.0	N/A	
707009PBP-N049	10	53.0	N/A	
707009PBP-N050	10	14.3	N/A	
707009PBP-N051	10	26.0	N/A	
707009PBP-N052	10	50.3	N/A	
707009PBP-N053	12	41.3	N/A	
707009PBP-N054	12	29.1	N/A	
707009PBP-N055	12	14.3	N/A	
707009PBP-N056	12	11.1	N/A	

Comments: 100% scan was performed on the floors, 25% scan was performed on the lower walls, and >10% scan was performed on the overhead surfaces. All values <300 dpm/100cm<sup>2</sup> after remediation.

Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
001.001 1 Floor	U234	NA	NA	22.32	24.0	NA	NA	Uranium NA Transuranic 4
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0420	0.1900			1	6	
	Am241	0.0690	0.0690			2	2	
002.001 2 Floor	U234	NA	NA	28.92	24.0	NA	NA	Uranium NA Transuranic 78
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	1.5800	0.1680			66	7	
	Am241	0.3120	0.1290			13	5	
003.001 3 Floor	U234	NA	NA	39.34	24.0	NA	NA	Uranium NA Transuranic 13
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.2050	0.2130			12	12	
	Am241	0.0200	0.1360			1	8	
004.001 4 Floor	U234	NA	NA	10.28	24.0	NA	NA	Uranium NA Transuranic 4
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1520	0.0920			2	1	
	Am241	0.0880	0.1560			1	2	
005.001 5 Floor	U234	NA	NA	5.25	24.0	NA	NA	Uranium NA Transuranic 1
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1620	0.2520			1	2	
	Am241	0.0330	0.1800			0	1	
006.001 6 Floor	U234	NA	NA	2.39	24.0	NA	NA	Uranium NA Transuranic 2
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.5320	0.1970			2	1	
	Am241	0.1510	0.1680			1	1	
007.001 7 Floor	U234	NA	NA	10.35	24.0	NA	NA	Uranium NA Transuranic 11
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.5920	0.2250			9	3	
	Am241	0.1340	0.1840			2	3	

Comments:



Survey Area: B

Survey Unit: 707009

Building: 707

Description: 2nd floor, room 200, west side

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
008.001 8 Floor	U234	NA	NA	8.46	24.0	NA	NA	Uranium NA Transuranic 1
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.2360			0	3	
	Am241	0.1110	0.1230			1	2	
009.001 9 Wall	U234	NA	NA	7.97	24.0	NA	NA	Uranium NA Transuranic 0
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.1940			0	2	
	Am241	0.0000	0.0960			0	1	
010.001 10 Wall	U234	NA	NA	12.82	24.0	NA	NA	Uranium NA Transuranic 2
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0250	0.0760			1	1	
	Am241	0.0680	0.1020			1	2	
011.001 11 Floor	U234	NA	NA	6.14	24.0	NA	NA	Uranium NA Transuranic 3
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1660	0.2170			2	2	
	Am241	0.1100	0.2050			1	2	
012.001 12 Floor	U234	NA	NA	10.16	24.0	NA	NA	Uranium NA Transuranic 15
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.9400	0.1860			14	3	
	Am241	0.0670	0.2030			1	3	
013.001 13 Wall	U234	NA	NA	7.36	24.0	NA	NA	Uranium NA Transuranic 0
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0090	0.2470			0	3	
	Am241	0.0010	0.2520			0	3	
014.001 14 Wall	U234	NA	NA	8.18	24.0	NA	NA	Uranium NA Transuranic 0
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0060	0.1600			0	2	
	Am241	0.0000	0.1650			0	2	

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707009

Classification: 2

Building: 707

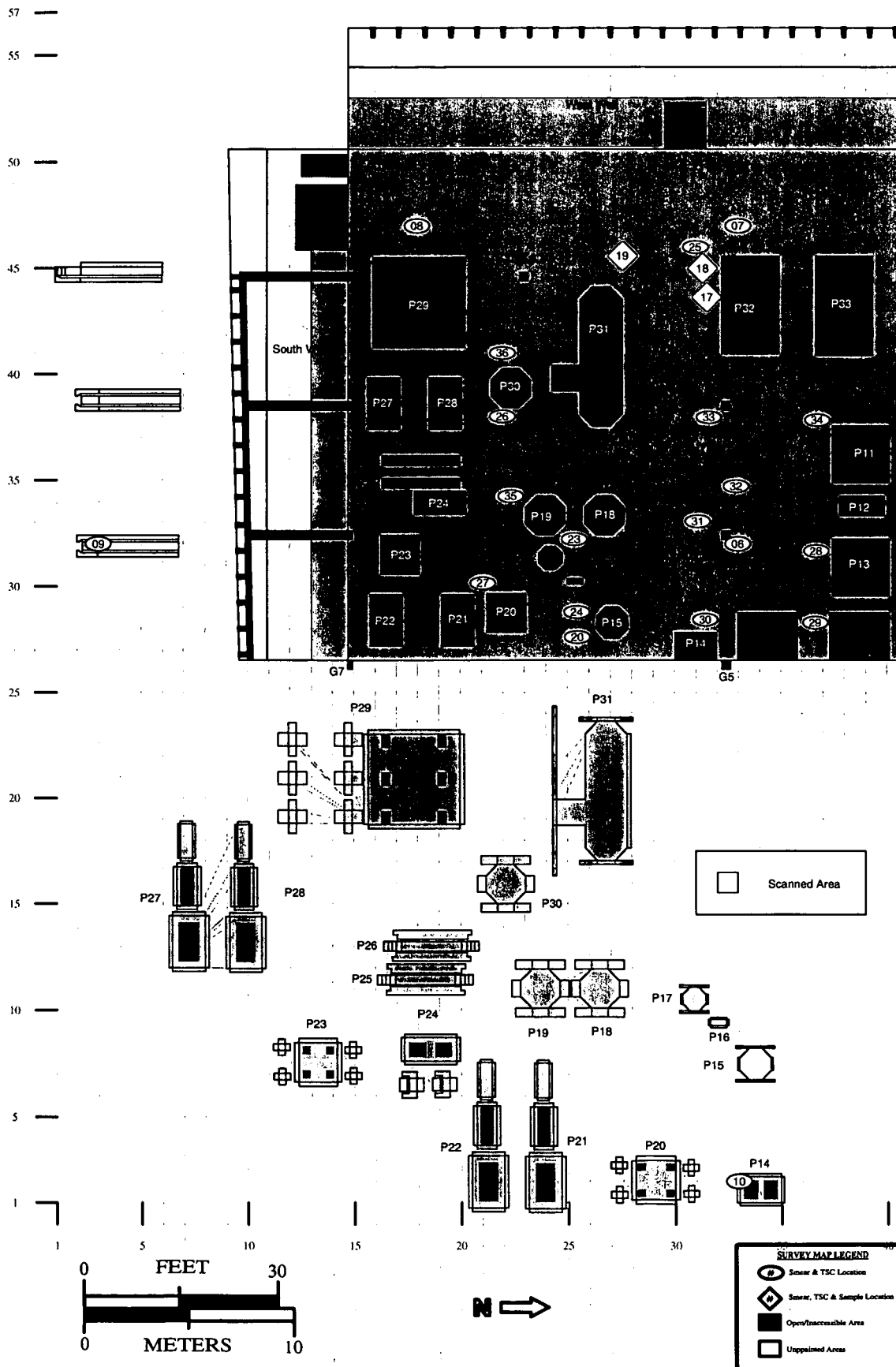
Survey Unit Description: Room 200 (west side)

Total Floor Area: 1052 sq. m

Total Area: 3830 sq. m

Grid Size: 15m x 15m

## SURVEY UNIT 707009 - MAP 1 OF 5



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707009

Classification: 2

Building: 707

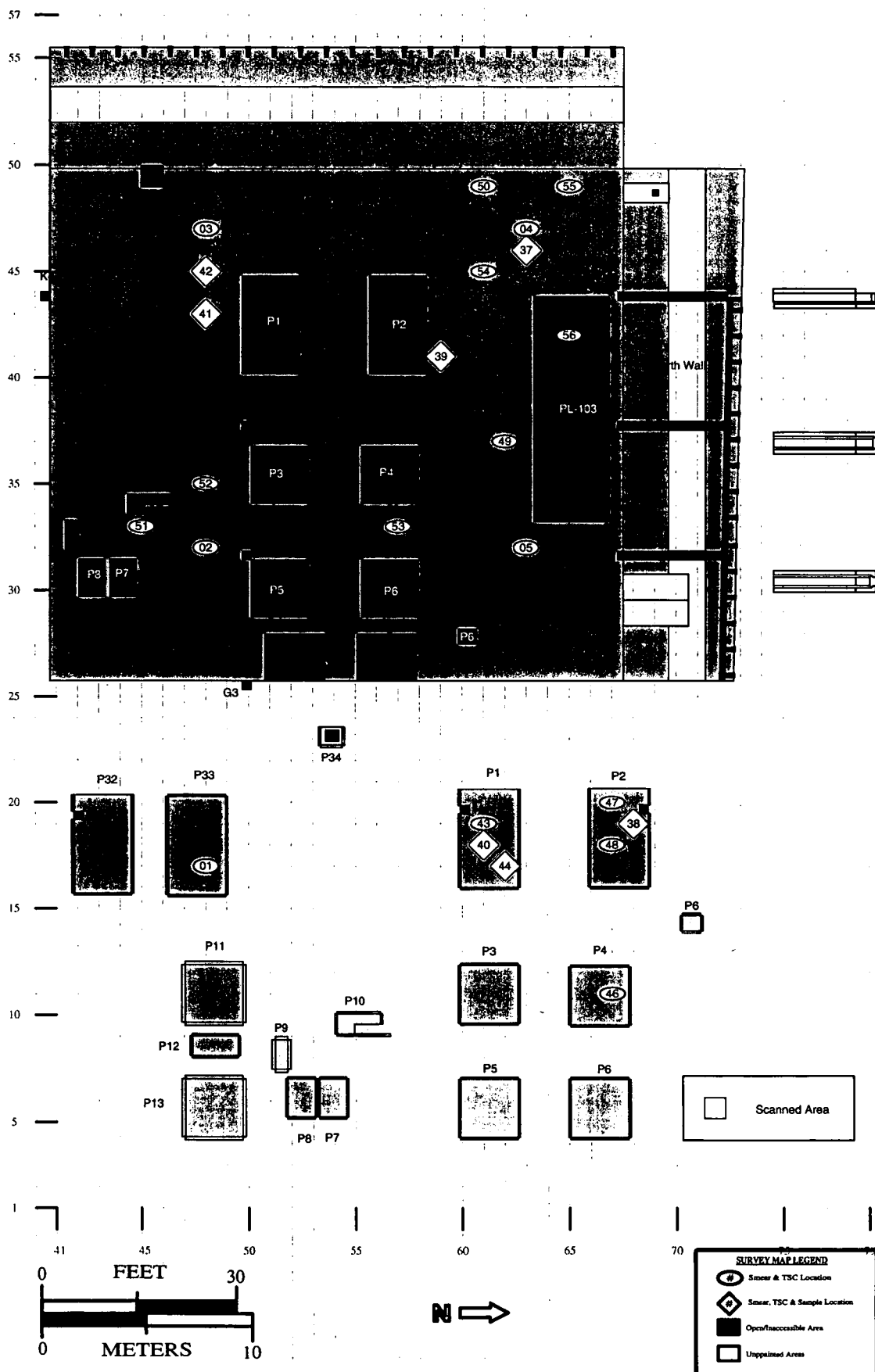
Survey Unit Description: Room 200 (west side)

Total Floor Area: 1052 sq. m

Total Area: 3830 sq. m

Grid Size: 15m x 15m

## SURVEY UNIT 707009 - MAP 2 OF 5

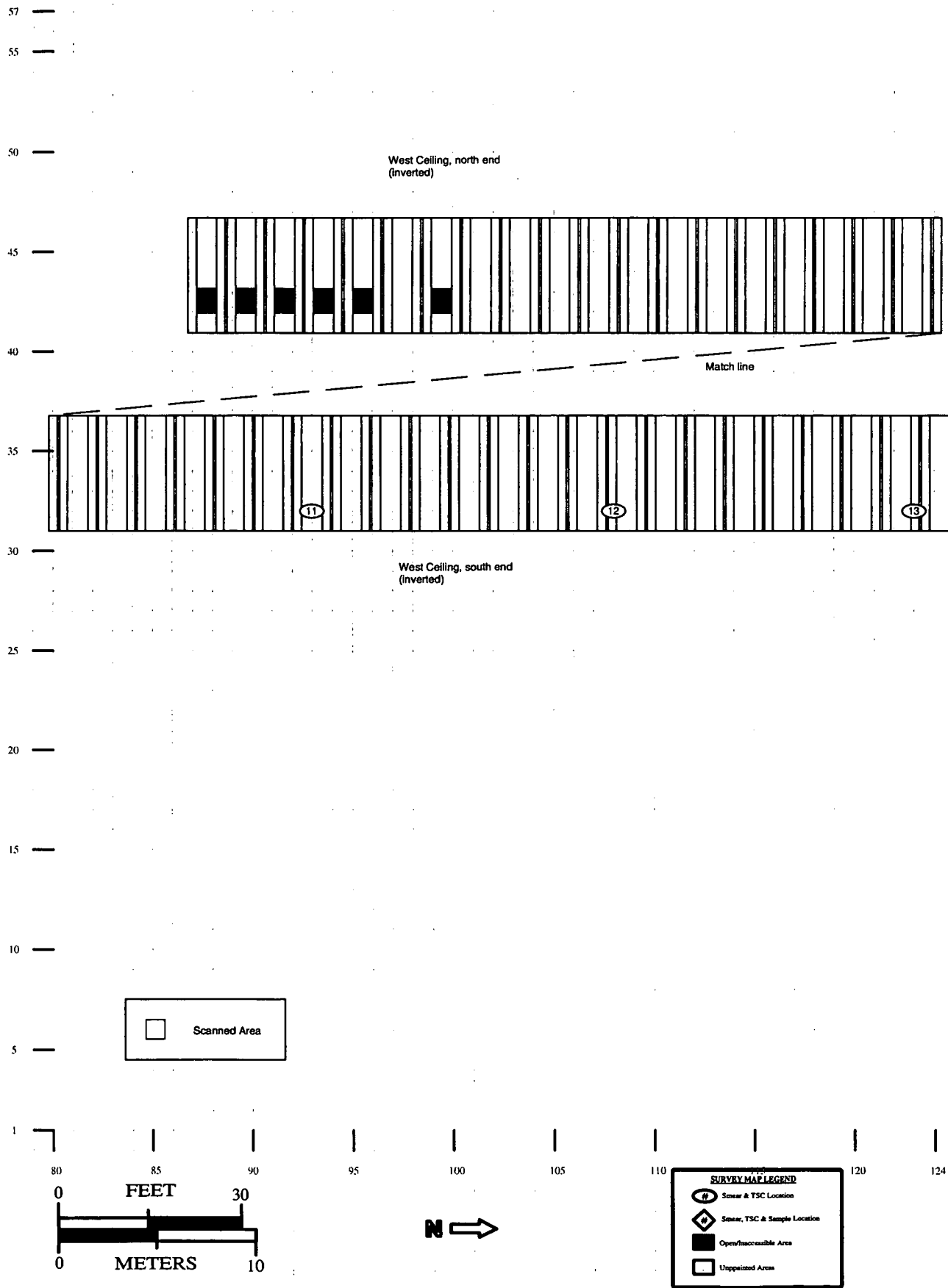


# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B      Survey Unit: 707009      Classification: 2  
 Building: 707  
 Survey Unit Description: Room 200 (west side)

Total Floor Area: 1052 sq. m      Total Area: 3830 sq. m      Grid Size: 15m x 15m

## SURVEY UNIT 707009 - MAP 3 OF 5



55

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707009

Classification: 2

Building: 707

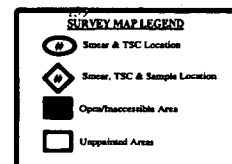
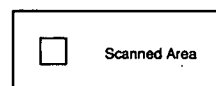
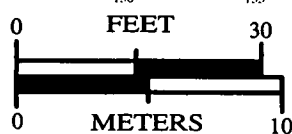
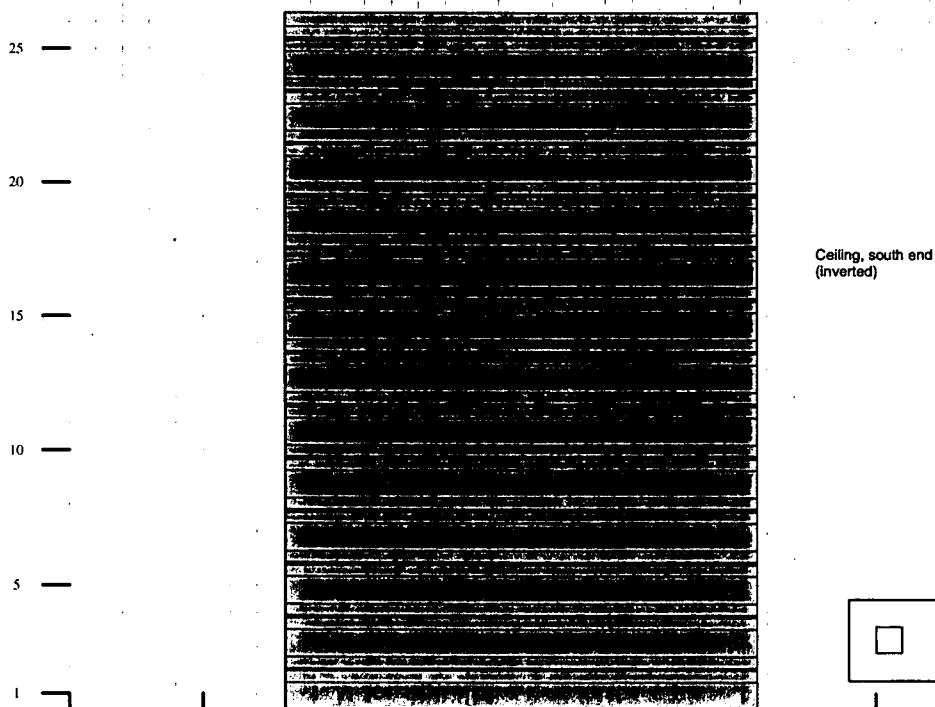
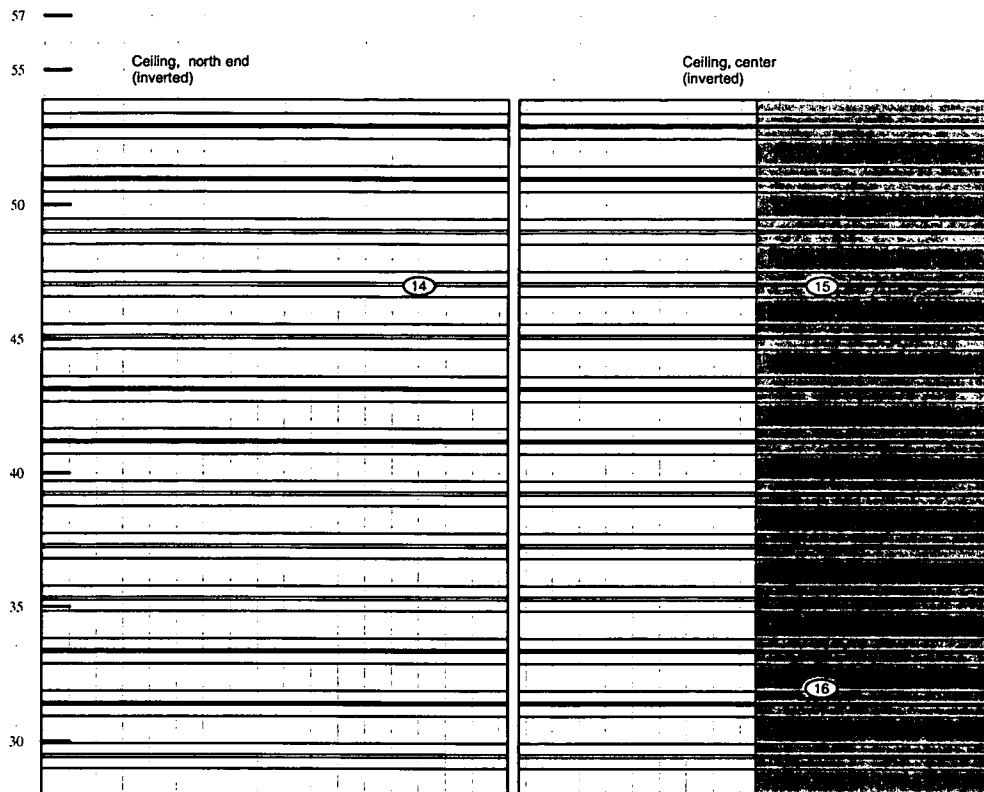
Survey Unit Description: Room 200 (west side)

Total Floor Area: 1052 sq. m

Total Area: 3830 sq. m

Grid Size: 15m x 15m

## **SURVEY UNIT 707009 - MAP 4 OF 5**



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707009

Classification: 2

Building: 707

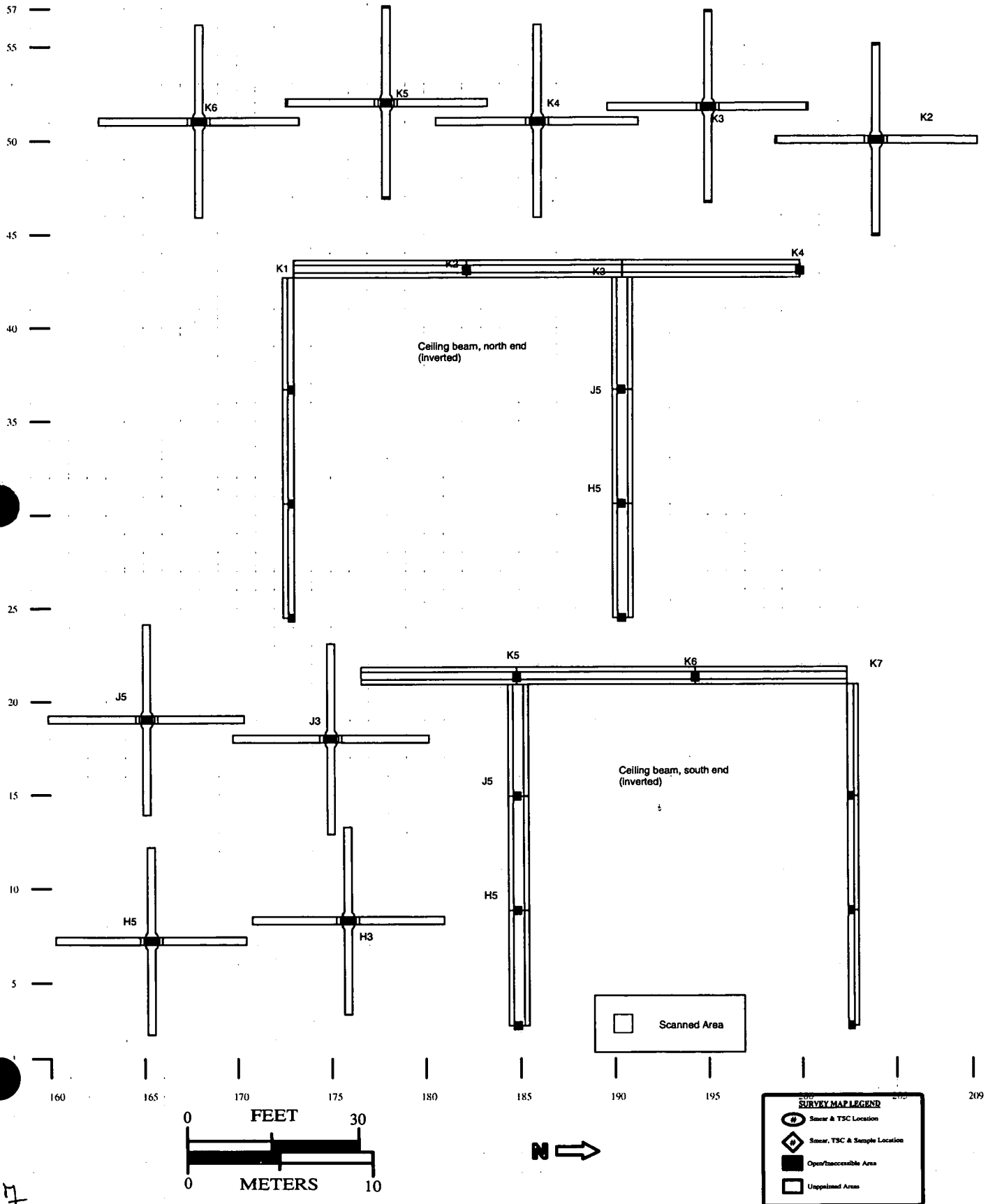
Survey Unit Description: Room 200 (west side)

Total Floor Area: 1052 sq. m

Total Area: 3830 sq. m

Grid Size: 15m x 15m

## SURVEY UNIT 707009 - MAP 5 OF 5



ATTACHMENT B3

Survey Unit 707010 Survey Data and Maps

# Investigation Documentation

Survey Unit: 707010

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	K9	450	87	397	Yes	246	No	N/A
2	Floor	K9	432	83	376	Yes	207	No	N/A
3	Floor	K9	352	67	303	Yes	207	No	N/A
4	Floor	K9	600	117	532	Yes	181	No	N/A
5	Floor	K9	606	119	541	Yes	181	No	N/A
6	Floor	K9	1032	194	883	Yes	218	No	N/A
7	Floor	K9	438	85	385	Yes	218	No	N/A
8	Floor	K9	500	94	427	Yes	223	No	N/A
9	Floor	K9	400	73	333	Yes	234	No	N/A
1	Floor	F8	519	148	789	Yes	101	No	N/A
2	Floor	D8	426	145	770	Yes	138	No	N/A
3	Floor	D16	1006	316	1679	Yes	117	No	N/A
4	Floor	E8	1075	212	1375	Yes	156	No	N/A
5	Floor	G9	323	59	386	Yes	33	No	N/A
6	Floor	D8	567	187	1214	Yes	52	No	N/A
7	Floor	K11	591	145	944	Yes	169	No	N/A
1	Wall	1	428	94	N/A	Yes	176	No	N/A
1	Floor	K11	881	370	1970	Yes	128	No	N/A
2	Floor	K11	515	156	831	Yes	170	No	N/A
3	Floor	K11	489	167	887	Yes	165	No	N/A
4	Floor	K12	580	75	397	Yes	117	No	N/A
5	Floor	K12	389	56	298	Yes	80	No	N/A
6	Floor	K13	389	160	849	Yes	106	No	N/A
7	Floor	K13	419	101	539	Yes	128	No	N/A

Note 1 - total activity per 600 cm<sup>2</sup> probe

Maximum

246

Note 2 - square meter average not required if spot is remediated and 600 cm<sup>2</sup> probe is used.

59



Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor, room 210

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 25

Nbr Biased Measurements Required: 25

Nbr QC Required: 5

Nbr Random Measurements Performed: 25

Nbr Biased Measurements Performed: 25

Nbr QC Performed: 5

#### Alpha

Maximum:	65.8 dpm/100cm <sup>2</sup>
Minimum:	-8.9 dpm/100cm <sup>2</sup>
Mean:	20.3 dpm/100cm <sup>2</sup>
Standard Deviation:	15.7
QC Maximum:	38.9 dpm/100cm <sup>2</sup>
QC Minimum:	10.6 dpm/100cm <sup>2</sup>
QC Mean:	26.1 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>W</sub> :	100.0 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>EMC</sub> :	300.0 dpm/100cm <sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 25

Nbr Biased Measurements Required: 25

Nbr Random Measurements Performed: 25

Nbr Biased Measurements Performed: 25

#### Alpha

Maximum:	5.4 dpm/100cm <sup>2</sup>
Minimum:	-0.9 dpm/100cm <sup>2</sup>
Mean:	0.0 dpm/100cm <sup>2</sup>
Standard Deviation:	1.4
Transuranic DCGL <sub>W</sub> :	20.0 dpm/100cm <sup>2</sup>

### Media Sample Results

Nbr Random Required: 15

Nbr Biased Required: 0

Nbr Random Collected: 15

Nbr Biased Collected: 0

#### Uranium

Maximum:	NA dpm/100cm <sup>2</sup>
Minimum:	NA dpm/100cm <sup>2</sup>
Mean:	NA dpm/100cm <sup>2</sup>
Standard Deviation:	NA
Uranium DCGL <sub>W</sub> :	5,000 dpm/100cm <sup>2</sup>
Uranium DCGL <sub>EMC</sub> :	15,000 dpm/100cm <sup>2</sup>

#### Transuranic

Maximum:	56 dpm/100cm <sup>2</sup>
Minimum:	0 dpm/100cm <sup>2</sup>
Mean:	10 dpm/100cm <sup>2</sup>
Standard Deviation:	14
Transuranic DCGL <sub>W</sub> :	100 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>EMC</sub> :	300 dpm/100cm <sup>2</sup>

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor, room 210

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	701822	09/26/04	Electra	3977	DP-6	01/31/05	0.213	NA	48.0	NA	T/S
2	520363	09/26/04	Electra	1384	DP-6	01/16/05	0.216	NA	48.0	NA	T/S
3	701564	09/26/04	Electra	1276	DP-6	03/09/05	0.223	NA	48.0	NA	T/S
4	701564	09/26/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
5	701564	09/26/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
6	513185	10/07/04	Electra	3977	DP-6	01/31/05	0.213	NA	48.0	NA	T/S
7	508194	10/08/04	Electra	4413	DP-6	03/09/05	0.208	NA	48.0	NA	T/S
8	508194	10/08/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
10	520363	09/26/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
11	520363	09/26/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor room 210

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707010PRP-N001	10	-0.6	N/A	
707010PRP-N002	11	-0.9	N/A	
707010PRP-N003	10	0.9	N/A	
707010PRP-N004	11	0.6	N/A	
707010PRP-N005	4	-0.6	N/A	
707010PRP-N006	8	-0.6	N/A	
707010PRP-N007	8	-0.6	N/A	
707010PRP-N008	8	-0.6	N/A	
707010PRP-N009	8	-0.6	N/A	
707010PRP-N010	8	-0.6	N/A	
707010PRP-N011	8	2.4	N/A	
707010PRP-N012	8	3.9	N/A	
707010PRP-N013	8	-0.6	N/A	
707010PRP-N014	11	0.6	N/A	
707010PRP-N015	4	5.4	N/A	
707010PRP-N016	5	-0.9	N/A	
707010PRP-N017	4	0.9	N/A	
707010PRP-N018	5	2.1	N/A	
707010PRP-N019	4	-0.6	N/A	
707010PRP-N020	5	0.6	N/A	
707010PRP-N021	4	-0.6	N/A	
707010PRP-N022	5	0.6	N/A	
707010PRP-N023	10	-0.6	N/A	
707010PRP-N024	8	3.9	N/A	
707010PRP-N025	8	-0.6	N/A	

Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor, room 210

## Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707010PBP-N026	10	-0.6	N/A	
707010PBP-N027	11	-0.9	N/A	
707010PBP-N028	11	-0.9	N/A	
707010PBP-N029	10	-0.6	N/A	
707010PBP-N030	11	-0.9	N/A	
707010PBP-N031	10	-0.6	N/A	
707010PBP-N032	11	-0.9	N/A	
707010PBP-N033	10	0.9	N/A	
707010PBP-N034	11	0.6	N/A	
707010PBP-N035	10	-0.6	N/A	
707010PBP-N036	11	-0.9	N/A	
707010PBP-N037	10	-0.6	N/A	
707010PBP-N038	11	-0.9	N/A	
707010PBP-N039	11	0.6	N/A	
707010PBP-N040	11	-0.9	N/A	
707010PBP-N041	11	0.6	N/A	
707010PBP-N042	11	-0.9	N/A	
707010PBP-N043	11	-0.9	N/A	
707010PBP-N044	11	-0.9	N/A	
707010PBP-N045	11	-0.9	N/A	
707010PBP-N046	11	-0.9	N/A	
707010PBP-N047	11	2.1	N/A	
707010PBP-N048	11	-0.9	N/A	
707010PBP-N049	4	-0.6	N/A	
707010PBP-N050	5	-0.9	N/A	

Comments:

63

Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor, room 210

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707010PRP-N001	1	37.6	N/A	
707010QRP-N001	2	29.2	N/A	
707010PRP-N002	1	18.8	N/A	
707010PRP-N003	1	18.8	N/A	
707010PRP-N004	1	6.2	N/A	
707010PRP-N005	3	40.5	N/A	
707010PRP-N006	7	-8.9	N/A	
707010PRP-N007	7	10.4	N/A	
707010PRP-N008	7	7.0	N/A	
707010PRP-N009	7	-8.9	N/A	
707010PRP-N010	7	26.2	N/A	
707010PRP-N011	7	-5.5	N/A	
707010PRP-N012	7	7.0	N/A	
707010PRP-N013	7	26.2	N/A	
707010PRP-N014	1	12.7	N/A	
707010PRP-N015	3	37.8	N/A	
707010PRP-N016	3	1.9	N/A	
707010PRP-N017	3	19.9	N/A	
707010PRP-N018	3	21.7	N/A	
707010PRP-N019	3	16.7	N/A	
707010PRP-N020	3	10.9	N/A	
707010PRP-N021	3	37.8	N/A	
707010PRP-N022	3	28.9	N/A	
707010PRP-N023	1	0.1	N/A	
707010PRP-N024	7	10.4	N/A	
707010PRP-N025	7	4.1	N/A	
707010QRP-N027	2	35.2	N/A	

64

Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor, room 210

### Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707010QRP-N036	2	16.7	N/A	
707010QRP-N039	2	38.9	N/A	
707010QRP-N048	2	10.6	N/A	

### Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707010PBP-N026	1	9.5	N/A	
707010PBP-N027	1	25.4	N/A	
707010PBP-N028	1	31.5	N/A	
707010PBP-N029	1	47.0	N/A	
707010PBP-N030	1	3.4	N/A	
707010PBP-N031	1	22.1	N/A	
707010PBP-N032	1	37.6	N/A	
707010PBP-N033	1	18.9	N/A	
707010PBP-N034	1	16.0	N/A	
707010PBP-N035	1	12.8	N/A	
707010PBP-N036	1	65.8	N/A	
707010PBP-N037	1	18.9	N/A	
707010PBP-N038	1	16.0	N/A	
707010PBP-N039	1	9.5	N/A	
707010PBP-N040	1	31.5	N/A	
707010PBP-N041	1	3.4	N/A	
707010PBP-N042	1	17.5	N/A	
707010PBP-N043	1	44.2	N/A	
707010PBP-N044	1	25.4	N/A	
707010PBP-N045	1	18.9	N/A	

65

Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor, room 210

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707010PBP-N046	1	16.0	N/A	
707010PBP-N047	1	18.9	N/A	
707010PBP-N048	1	34.8	N/A	
707010PBP-N049	3	50.1	N/A	
707010PBP-N050	3	39.3	N/A	

**Comments:** 100% scan was performed on the floors, 25% scan was performed on the lower walls, and >10% scan was performed on the overhead surfaces. All values <300 dpm/100cm<sup>2</sup> after remediation.

66

Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor, room 210

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
001.001 1 Floor	U234	NA	NA	24.86	26.3	NA	NA	Uranium NA Transuranic 7
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1670	0.1380			5	5	
	Am241	0.0540	0.1990			2	7	
002.001 2 Floor	U234	NA	NA	15.00	26.3	NA	NA	Uranium NA Transuranic 16
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.7300	0.1870			14	4	
	Am241	0.0740	0.1570			2	3	
003.001 3 Floor	U234	NA	NA	35.53	26.3	NA	NA	Uranium NA Transuranic 56
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	1.0600	0.1950			49	9	
	Am241	0.1460	0.1640			7	8	
004.001 4 Floor	U234	NA	NA	18.33	26.3	NA	NA	Uranium NA Transuranic 12
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.3700	0.1240			9	3	
	Am241	0.1480	0.1410			4	3	
005.001 5 Floor	U234	NA	NA	21.95	26.3	NA	NA	Uranium NA Transuranic 7
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1560	0.1290			5	4	
	Am241	0.0800	0.0800			2	2	
006.001 6 Floor	U234	NA	NA	17.86	26.3	NA	NA	Uranium NA Transuranic 7
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.2500	0.1350			6	3	
	Am241	0.0650	0.1610			2	4	
007.001 7 Floor	U234	NA	NA	22.42	26.3	NA	NA	Uranium NA Transuranic 4
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1150	0.1940			3	6	
	Am241	0.0060	0.1600			0	5	

Comments: Medias collected prior to shaving the floor.

67



Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor room 210

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
008.001 8 Floor	U234	NA	NA	26.53	26.3	NA	NA	Uranium NA Transuranic 12
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.2650	0.2440			9	9	
	Am241	0.0850	0.2100			3	7	
009.001 9 Floor	U234	NA	NA	17.89	26.3	NA	NA	Uranium NA Transuranic 18
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.7390	0.2480			17	6	
	Am241	0.0270	0.1440			1	3	
010.001 10 Floor	U234	NA	NA	53.56	26.3	NA	NA	Uranium NA Transuranic 5
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0460	0.1710			3	12	
	Am241	0.0270	0.1960			2	14	
011.001 11 Wall	U234	NA	NA	7.29	26.3	NA	NA	Uranium NA Transuranic 0
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.1730			0	2	
	Am241	0.0410	0.1230			0	1	
012.001 12 Wall	U234	NA	NA	10.20	26.3	NA	NA	Uranium NA Transuranic 2
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1370	0.2580			2	3	
	Am241	0.0000	0.1460			0	2	
013.001 13 Room 211 roof	U234	NA	NA	31.44	26.3	NA	NA	Uranium NA Transuranic 1
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0130	0.2060			1	9	
	Am241	0.0000	0.1910			0	8	
014.001 14 Wall	U234	NA	NA	30.20	26.3	NA	NA	Uranium NA Transuranic 2
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.2670			0	11	
	Am241	0.0540	0.1640			2	7	

68

Survey Area: B

Survey Unit: 707010

Building: 707

Description: 2nd floor, room 210

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
001.001 26 Biased Floor RIN 04C0031	U234	NA	NA	104.08	26.3	NA	NA	Uranium NA Transuranic 2
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.1940			0	26	
	Am241	0.0177	0.1230			2	17	

69

**Total Floor Area: 1389 sq. m      Total Area: 5562 sq. m      Grid Size: 16 m x 16 m**

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707010

Classification: 2

Building: 707

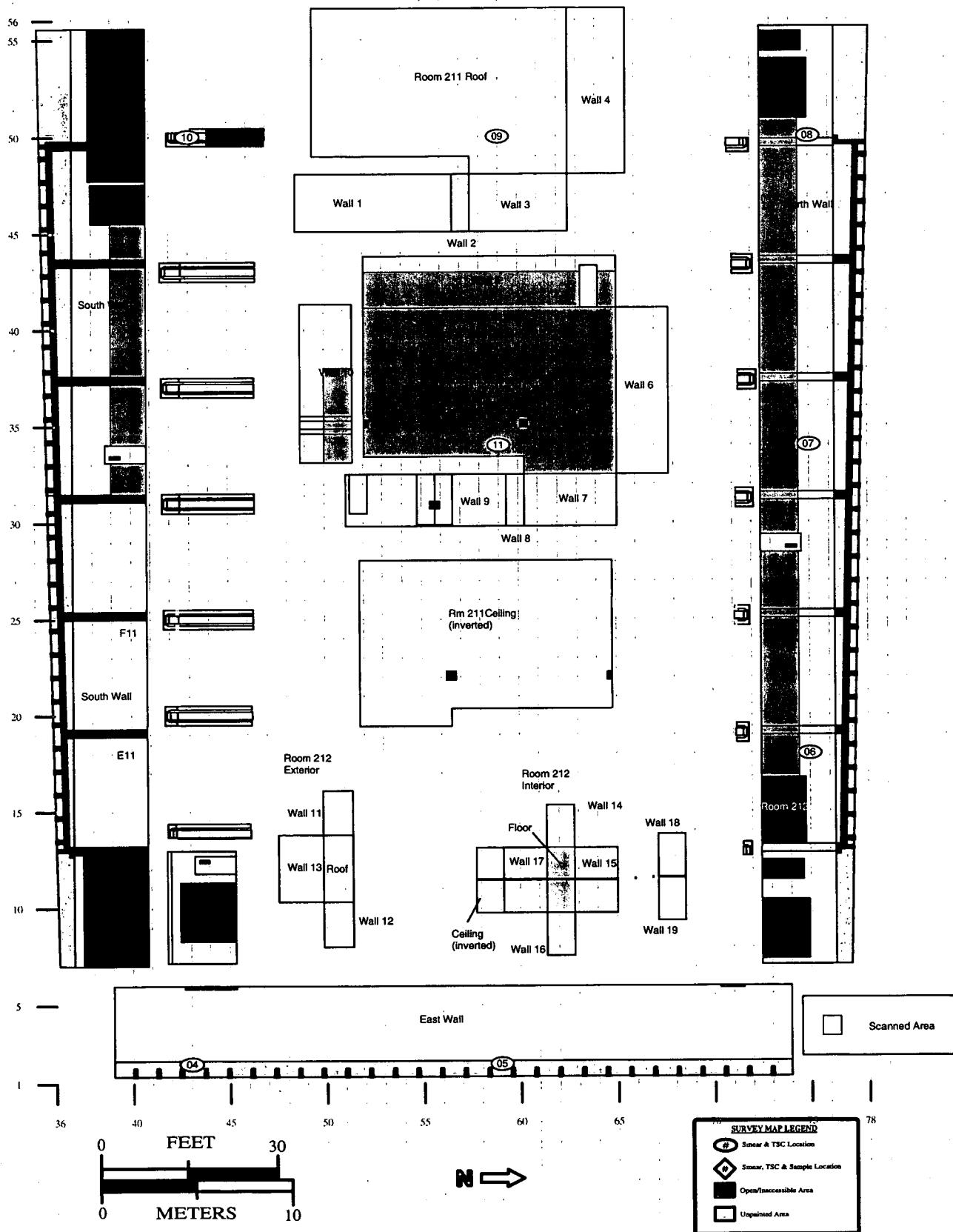
Survey Unit Description: Room 210

Total Floor Area: 1389 sq. m

Total Area: 5562 sq. m

Grid Size: 16 m x 16 m

## **SURVEY UNIT 707010 - MAP 2 OF 7**



**Survey Area: B**      **Survey Unit: 707010**      **Classification: 2**  
**Building: 707**  
**Survey Unit Description: Room 210**

**Total Floor Area: 1389 sq. m**      **Total Area: 5562 sq. m**      **Grid Size: 16 m x 16 m**

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707010

Classification: 2

Building: 707

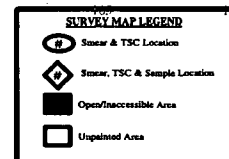
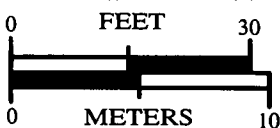
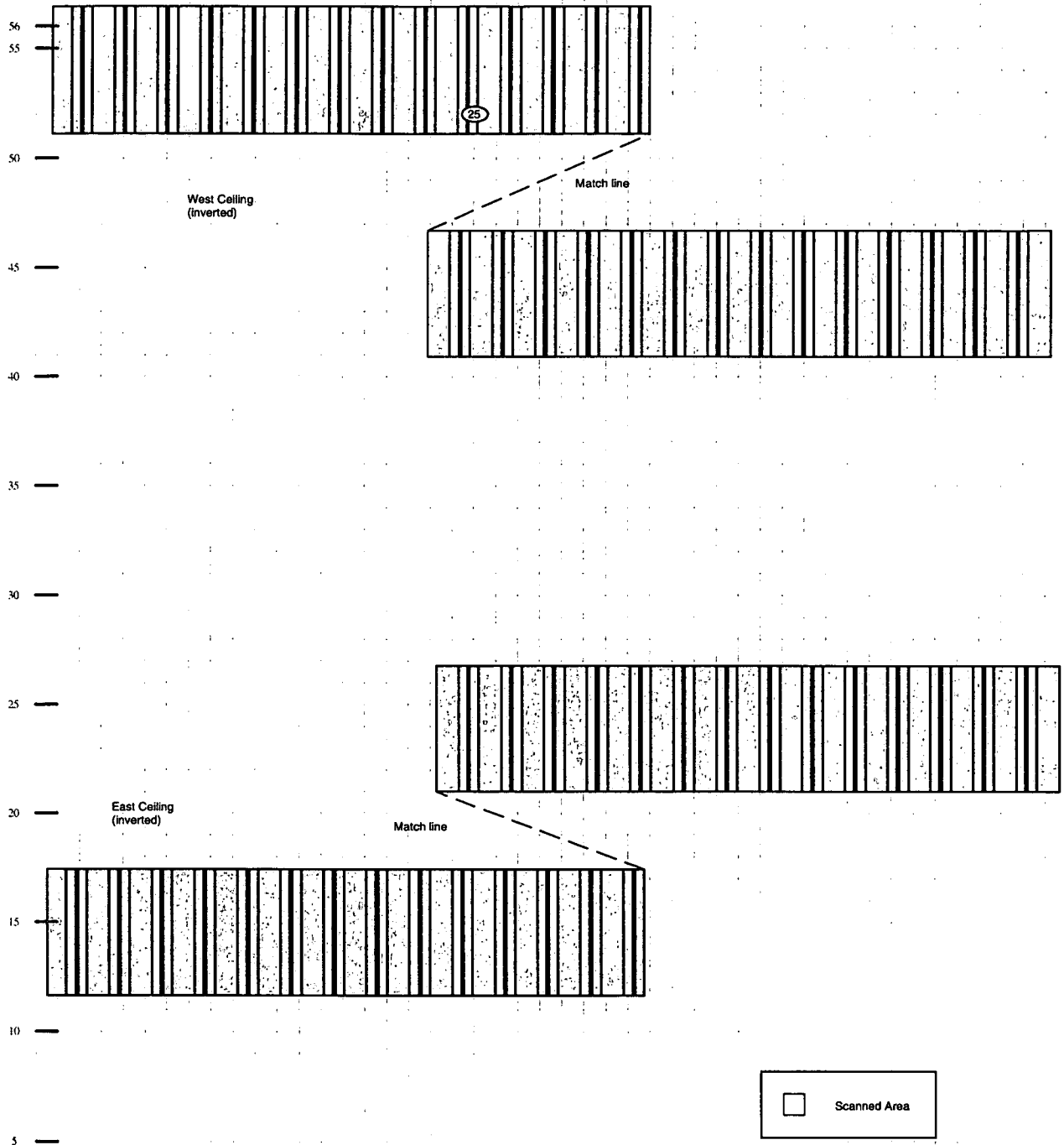
Survey Unit Description: Room 210

Total Floor Area: 1389 sq. m

Total Area: 5562 sq. m

Grid Size: 16 m x 16 m

## **SURVEY UNIT 707010 - MAP 4 OF 7**



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

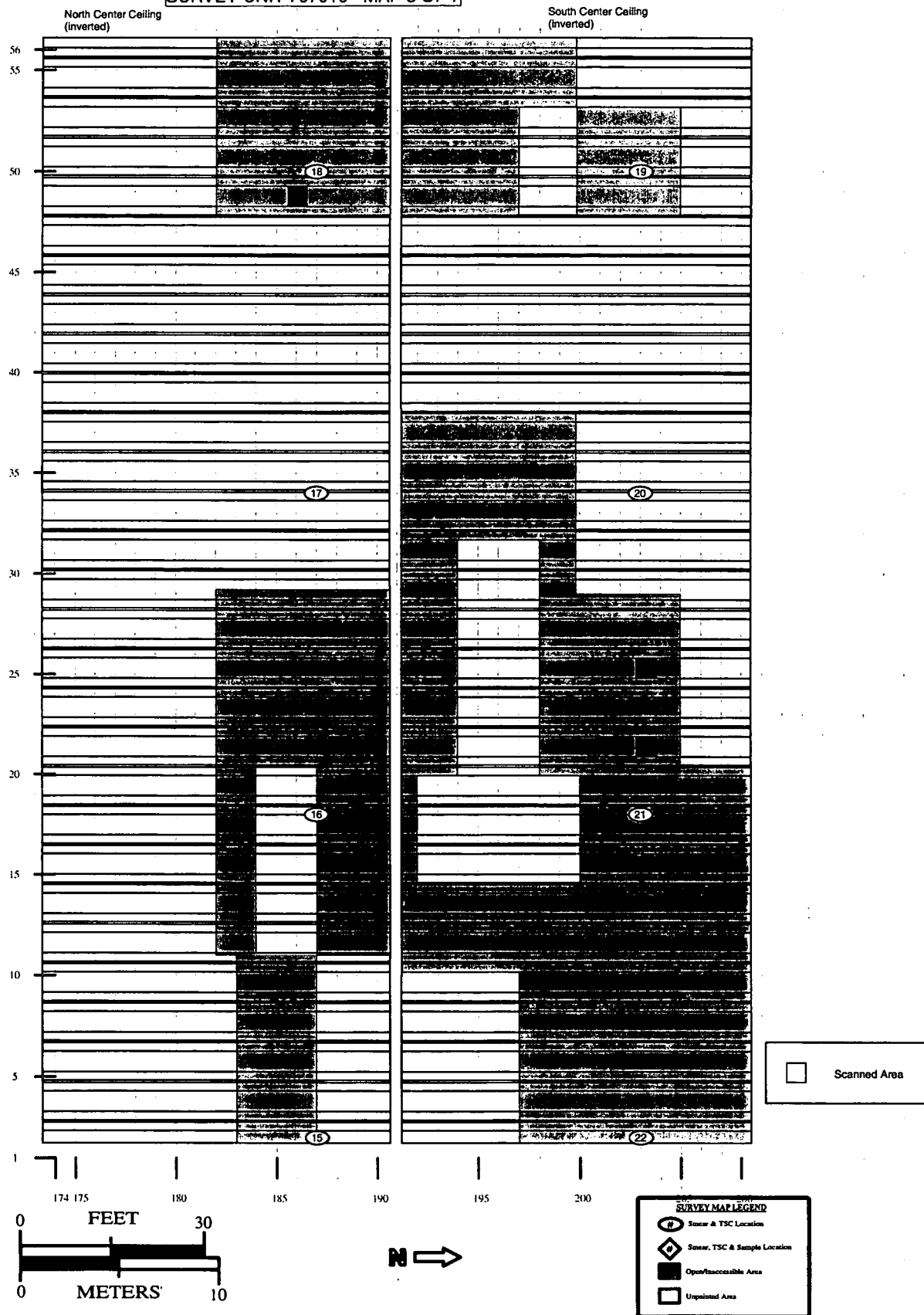
Survey Area: B      Survey Unit: 707010      Classification: 2

Building: 707

Survey Unit Description: Room 210

Total Floor Area: 1389 sq. m      Total Area: 5562 sq. m      Grid Size: 16 m x 16 m

## **SURVEY UNIT 707010 - MAP 5 OF 7**



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707010

Classification: 2

Building: 707

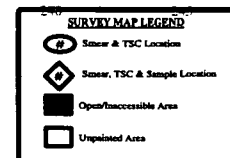
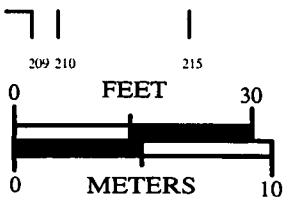
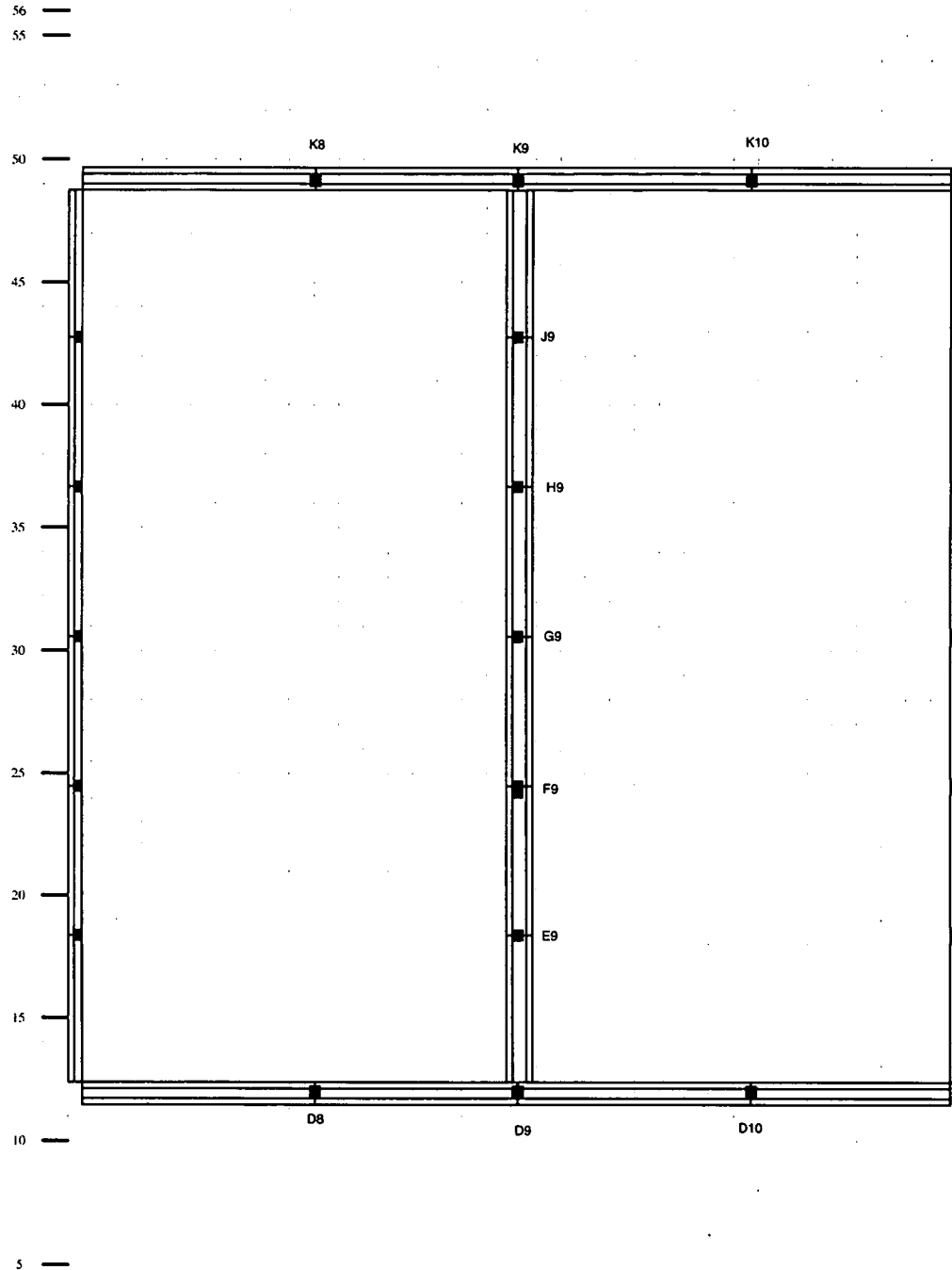
Survey Unit Description: Room 210

Total Floor Area: 1389 sq. m

Total Area: 5562 sq. m

Grid Size: 16 m x 16 m

## **SURVEY UNIT 707010 - MAP 6 OF 7**



75



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707010

Classification: 2

Building: 707

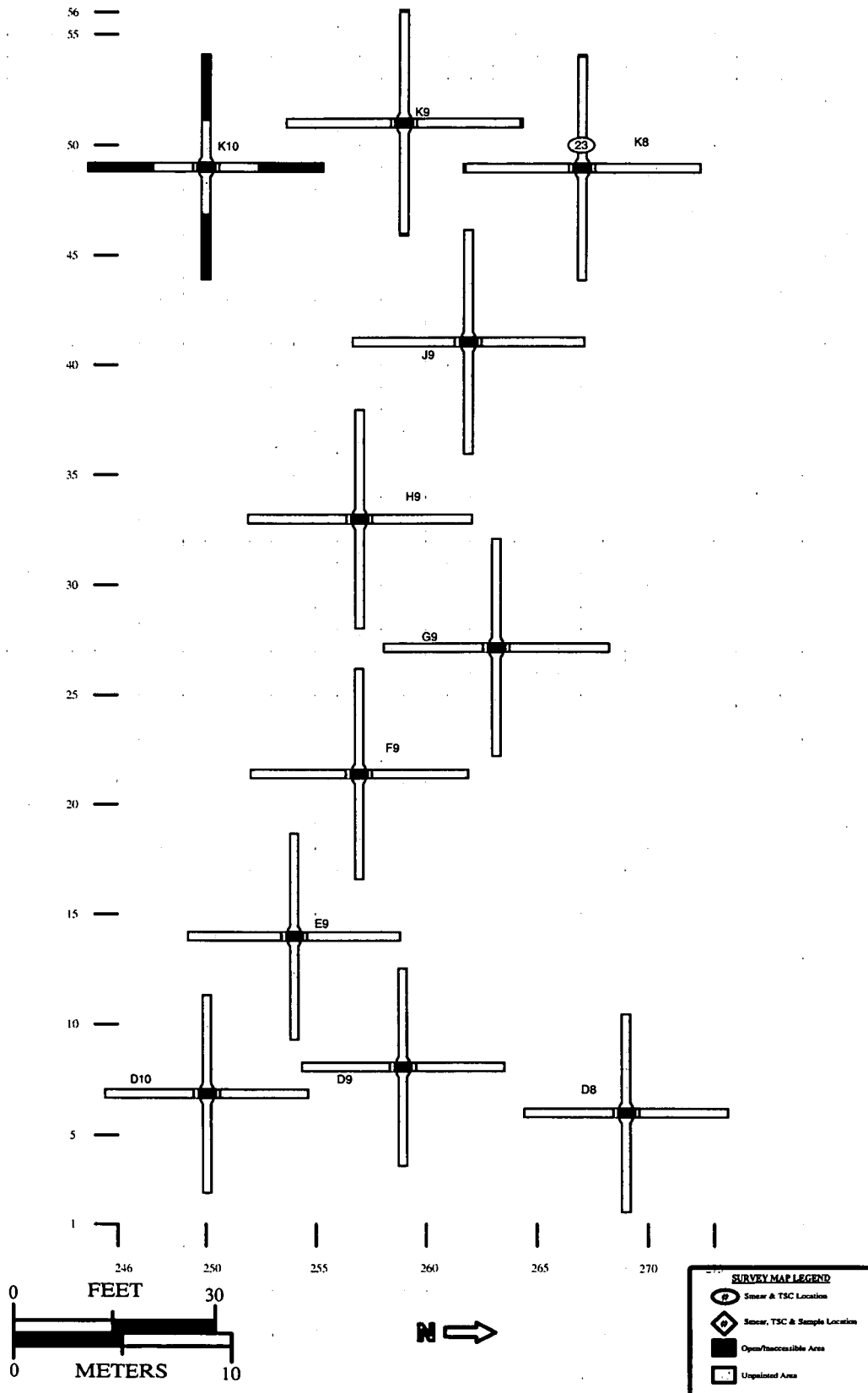
Survey Unit Description: Room 210

Total Floor Area: 1389 sq. m

Total Area: 5562 sq. m

Grid Size: 16 m x 16 m

## SURVEY UNIT 707010 - MAP 7 OF 7



ATTACHMENT B4

Survey Unit 707011 Survey Data and Maps

Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707, 2nd Floor, Room 220 east quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 50

Nbr QC Required: 7

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 50

Nbr QC Performed: 7

#### Alpha

Maximum: 31.6 dpm/100cm<sup>2</sup>  
Minimum: -13.0 dpm/100cm<sup>2</sup>  
Mean: 8.3 dpm/100cm<sup>2</sup>  
Standard Deviation: 10.4  
QC Maximum: 21.6 dpm/100cm<sup>2</sup>  
QC Minimum: -0.4 dpm/100cm<sup>2</sup>  
QC Mean: 9.5 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 50

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 50

#### Alpha

Maximum: 4.2 dpm/100cm<sup>2</sup>  
Minimum: -0.9 dpm/100cm<sup>2</sup>  
Mean: 0.2 dpm/100cm<sup>2</sup>  
Standard Deviation: 1.1  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 4

Nbr Biased Required: 0

Nbr Random Collected: 4

Nbr Biased Collected: 0

#### Uranium

Maximum: NA dpm/100cm<sup>2</sup>  
Minimum: NA dpm/100cm<sup>2</sup>  
Mean: NA dpm/100cm<sup>2</sup>  
Standard Deviation: NA  
Uranium DCGL<sub>w</sub>: 5,000 dpm/100cm<sup>2</sup>  
Uranium DCGL<sub>EMC</sub>: 15,000 dpm/100cm<sup>2</sup>

#### Transuranic

Maximum: 1 dpm/100cm<sup>2</sup>  
Minimum: 0 dpm/100cm<sup>2</sup>  
Mean: 1 dpm/100cm<sup>2</sup>  
Standard Deviation: 1  
Transuranic DCGL<sub>w</sub>: 100 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300 dpm/100cm<sup>2</sup>

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707, 2nd Floor, Room 220 east quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	702058	08/01/04	Electra	1259	DP-6	10/22/04	0.224	NA	48.0	NA	T/S
2	701418	08/01/04	Electra	2306	DP-6	11/17/04	0.218	NA	48.0	NA	T/S
3	702058	08/01/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	701418	08/01/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
5	600638	08/03/04	Electra	1436	DP-6	01/21/05	0.227	NA	48.0	NA	T/S
6	701418	08/03/04	Electra	2306	DP-6	11/17/04	0.218	NA	48.0	NA	T/S
7	600638	08/03/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
8	701418	08/03/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
9	701418	08/08/04	Electra	4176	DP-6	01/16/05	0.220	NA	48.0	NA	T/S
10	702058	08/08/04	Electra	3134	DP-6	11/03/04	0.219	NA	48.0	NA	T/S
11	702058	08/08/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
12	509284	10/05/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
13	509552	10/05/04	Electra	4413	DP-6	03/09/05	0.208	NA	48.0	NA	T/S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707, 2nd Floor, Room 220 east quadrant

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707011PRP-N001	12	0.0	N/A	
707011PRP-N002	11	1.2	N/A	
707011PRP-N003	4	-0.3	N/A	
707011PRP-N004	4	4.2	N/A	
707011PRP-N005	4	-0.3	N/A	
707011PRP-N006	4	4.2	N/A	
707011PRP-N007	11	-0.3	N/A	
707011PRP-N008	4	1.2	N/A	
707011PRP-N009	4	1.2	N/A	
707011PRP-N010	12	1.5	N/A	
707011PRP-N011	11	-0.3	N/A	
707011PRP-N012	11	-0.3	N/A	
707011PRP-N013	11	-0.3	N/A	
707011PRP-N014	11	-0.3	N/A	
707011PRP-N015	4	-0.3	N/A	

80

Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707, 2nd Floor, Room 220 east quadrant

## Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707011PBP-N016	4	1.2	N/A	
707011PBP-N017	4	-0.3	N/A	
707011PBP-N018	4	-0.3	N/A	
707011PBP-N019	4	1.2	N/A	
707011PBP-N020	4	-0.3	N/A	
707011PBP-N021	4	-0.3	N/A	
707011PBP-N022	4	-0.3	N/A	
707011PBP-N023	4	1.2	N/A	
707011PBP-N024	4	-0.3	N/A	
707011PBP-N025	4	2.7	N/A	
707011PBP-N026	4	-0.3	N/A	
707011PBP-N027	4	1.2	N/A	
707011PBP-N028	3	-0.6	N/A	
707011PBP-N029	3	-0.6	N/A	
707011PBP-N030	3	0.9	N/A	
707011PBP-N031	3	-0.6	N/A	
707011PBP-N032	3	-0.6	N/A	
707011PBP-N033	3	0.9	N/A	
707011PBP-N034	3	-0.6	N/A	
707011PBP-N035	3	-0.6	N/A	
707011PBP-N036	3	-0.6	N/A	
707011PBP-N037	3	-0.6	N/A	
707011PBP-N038	3	2.4	N/A	
707011PBP-N039	3	-0.6	N/A	
707011PBP-N040	3	0.9	N/A	
707011PBP-N041	3	-0.6	N/A	
707011PBP-N042	3	-0.6	N/A	

81

Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707-2nd Floor, Room 220 east quadrant

## Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707011PBP-N043	3	0.9	N/A	
707011PBP-N044	3	-0.6	N/A	
707011PBP-N045	7	0.6	N/A	
707011PBP-N046	8	0.0	N/A	
707011PBP-N047	7	-0.9	N/A	
707011PBP-N048	8	0.0	N/A	
707011PBP-N049	7	-0.9	N/A	
707011PBP-N050	8	0.0	N/A	
707011PBP-N051	7	-0.9	N/A	
707011PBP-N052	8	0.0	N/A	
707011PBP-N053	7	-0.9	N/A	
707011PBP-N054	8	0.0	N/A	
707011PBP-N055	7	0.6	N/A	
707011PBP-N056	8	1.5	N/A	
707011PBP-N057	7	-0.9	N/A	
707011PBP-N058	8	0.0	N/A	
707011PBP-N059	7	-0.9	N/A	
707011PBP-N060	8	0.0	N/A	
707011PBP-N061	7	0.6	N/A	
707011PBP-N062	8	0.0	N/A	
707011PBP-N063	7	-0.9	N/A	
707011PBP-N064	8	0.0	N/A	
707011PBP-N065	7	0.6	N/A	

Comments:

Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707, 2nd Floor, Room 220 east quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707011PRP-N001	1	-2.4	N/A	
707011PRP-N002	9	4.3	N/A	
707011PRP-N003	1	0.8	N/A	
707011QRP-N003	2	-0.4	N/A	
707011PRP-N004	1	18.6	N/A	
707011QRP-N004	2	12.4	N/A	
707011PRP-N005	1	6.6	N/A	
707011QRP-N005	2	4.2	N/A	
707011PRP-N006	1	27.5	N/A	
707011QRP-N006	2	21.6	N/A	
707011PRP-N007	9	19.3	N/A	
707011PRP-N008	1	21.7	N/A	
707011QRP-N008	2	11.5	N/A	
707011PRP-N009	1	6.6	N/A	
707011QRP-N009	2	13.8	N/A	
707011PRP-N010	13	10.3	N/A	
707011PRP-N011	9	-2.1	N/A	
707011PRP-N012	9	25.2	N/A	
707011PRP-N013	9	-11.2	N/A	
707011PRP-N014	9	7.0	N/A	
707011PRP-N015	1	-2.4	N/A	
707011QRP-N015	2	3.7	N/A	



Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707, 2nd Floor, Room 220 east quadrant

## Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707011PBP-N016	1	7.5	N/A	
707011PBP-N017	1	1.7	N/A	
707011PBP-N018	1	1.2	N/A	
707011PBP-N019	1	1.7	N/A	
707011PBP-N020	1	13.7	N/A	
707011PBP-N021	1	9.7	N/A	
707011PBP-N022	1	16.4	N/A	
707011PBP-N023	1	14.2	N/A	
707011PBP-N024	1	16.4	N/A	
707011PBP-N025	1	13.7	N/A	
707011PBP-N026	1	13.7	N/A	
707011PBP-N027	1	9.2	N/A	
707011PBP-N028	1	31.6	N/A	
707011PBP-N029	2	29.7	N/A	
707011PBP-N030	2	-3.8	N/A	
707011PBP-N031	1	4.8	N/A	
707011PBP-N032	1	16.4	N/A	
707011PBP-N033	2	11.3	N/A	
707011PBP-N034	1	4.8	N/A	
707011PBP-N035	2	11.3	N/A	
707011PBP-N036	1	10.6	N/A	
707011PBP-N037	2	5.4	N/A	
707011PBP-N038	1	4.8	N/A	
707011PBP-N039	1	8.8	N/A	
707011PBP-N040	2	-7.0	N/A	
707011PBP-N041	2	-7.9	N/A	
707011PBP-N042	1	-7.3	N/A	

Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707, 2nd Floor, Room 220 east quadrant

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707011PBP-N043	2	-6.1	N/A	
707011PBP-N044	1	-7.3	N/A	
707011PBP-N045	6	-3.8	N/A	
707011PBP-N046	6	2.1	N/A	
707011PBP-N047	5	19.0	N/A	
707011PBP-N048	6	17.3	N/A	
707011PBP-N049	5	-7.4	N/A	
707011PBP-N050	6	-13.0	N/A	
707011PBP-N051	5	24.8	N/A	
707011PBP-N052	6	8.1	N/A	
707011PBP-N053	5	4.5	N/A	
707011PBP-N054	6	11.3	N/A	
707011PBP-N055	5	13.3	N/A	
707011PBP-N056	6	14.5	N/A	
707011PBP-N057	5	-1.7	N/A	
707011PBP-N058	6	23.7	N/A	
707011PBP-N059	5	4.5	N/A	
707011PBP-N060	6	17.3	N/A	
707011PBP-N061	5	19.0	N/A	
707011PBP-N062	6	8.1	N/A	
707011PBP-N063	6	17.3	N/A	
707011PBP-N064	5	1.4	N/A	
707011PBP-N065	6	12.2	N/A	

Comments: 25% scan was performed on the lower walls, and >10% scan was performed on the overhead surfaces. All values <300 dpm/100cm<sup>2</sup> after remediation.

Survey Area: B

Survey Unit: 707011

Building: 707

Description: B707, 2nd Floor, Room 220 east quadrant

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
009.001 9 Wall	U234	NA	NA	51.93	24.0	NA	NA	Uranium NA Transuranic 1
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.2100			0	16	
	Am241	0.0140	0.1650			1	12	
010.001 10 Wall	U234	NA	NA	18.18	24.0	NA	NA	Uranium NA Transuranic 0
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.2250			0	6	
	Am241	0.0000	0.2040			0	5	
011.001 11 Wall	U234	NA	NA	6.84	24.0	NA	NA	Uranium NA Transuranic 1
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1420	0.1600			1	2	
	Am241	0.0000	0.2820			0	3	
014.001 14 Wall	U234	NA	NA	24.51	24.0	NA	NA	Uranium NA Transuranic 1
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.2060			0	7	
	Am241	0.0150	0.1780			1	6	

Comments:

ATTACHMENT B5

Survey Unit 707012 Survey Data and Maps

## Investigation Documentation

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	K16	603	N/A	N/A	Yes	15	Yes	17.1
2	Floor	K16	1195	N/A	N/A	Yes	12	Yes	31.7
3	Floor	K16	6933	N/A	N/A	Yes	27	Yes	14.1
4	Floor	K16	948	N/A	N/A	Yes	25	Yes	9.4
5	Floor	K16	733	N/A	N/A	Yes	21	Yes	18.7
6	Floor	K16	508	N/A	N/A	Yes	18	Yes	12.0
7	Floor	K16	1619	N/A	N/A	Yes	39	Yes	34.2
8	Floor	K16	457	N/A	N/A	Yes	51	Yes	37.5
9	Floor	K16	692	N/A	N/A	Yes	30	Yes	45.0
10	Floor	K16	2594	N/A	N/A	Yes	45	Yes	35.3
11	Floor	K16	3351	N/A	N/A	Yes	21	Yes	28.0
12	Floor	K16	1489	N/A	N/A	Yes	31	Yes	69.3
13	Floor	K16	422	N/A	N/A	Yes	31	Yes	33.6
14	Floor	K16	325	N/A	N/A	Yes	31	Yes	39.2
15	Floor	K16	508	N/A	N/A	Yes	31	Yes	40.3
16	Floor	K16	987	N/A	N/A	Yes	31	Yes	46.6
17	Floor	K16	2975	N/A	N/A	Yes	31	Yes	37.2
18	Floor	K15	588	N/A	N/A	Yes	9	Yes	22.4
19	Floor	K15	720	N/A	N/A	Yes	25	Yes	19.7
20	Floor	K15	929	N/A	N/A	Yes	-3	Yes	19.0
21	Floor	L15	496	N/A	N/A	Yes	25	Yes	12.3
22	Floor	L15	423	N/A	N/A	Yes	42	Yes	17.8
23	Floor	L15	523	N/A	N/A	Yes	28	Yes	30.2
24	Floor	K15	354	N/A	N/A	Yes	31	Yes	26.1
25	Floor	J15	343	N/A	N/A	Yes	47	Yes	29.7
26	Floor	J15	568	N/A	N/A	Yes	22	Yes	16.8
27	Floor	K16	468	N/A	N/A	Yes	47	Yes	20.0
28	Floor	K16	1251	N/A	N/A	Yes	3	Yes	9.5
29	Floor	K16	400	N/A	N/A	Yes	41	Yes	34.6
30	Floor	K16	470	N/A	N/A	Yes	19	Yes	12.7
31	Floor	K16	3306	N/A	N/A	Yes	16	Yes	13.8
32	Floor	K16	1051	N/A	N/A	Yes	9	Yes	17.2
33	Floor	H16	458	N/A	N/A	Yes	0	Yes	20.5
34	Floor	H16	522	N/A	N/A	Yes	32	Yes	33.2
35	Floor	H16	300	N/A	N/A	Yes	17	Yes	25.0
36	Floor	H16	600	N/A	N/A	Yes	14	Yes	24.6
37	Floor	H16	926	N/A	N/A	Yes	17	Yes	38.3
38	Floor	H16	1194	N/A	N/A	Yes	23	Yes	36.3
39	Floor	H16	589	N/A	N/A	Yes	17	Yes	25.2
40	Floor	H16	922	N/A	N/A	Yes	3	Yes	24.6
41	Floor	H16	454	N/A	N/A	Yes	26	Yes	24.7
42	Floor	H16	454	N/A	N/A	Yes	38	Yes	30.1
43	Floor	H16	92000	N/A	N/A	Yes	7	Yes	23.1
44	Floor	H16	391	N/A	N/A	Yes	23	Yes	26.5

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum

51

69

88

## Investigation Documentation

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
45	Floor	H16	600	N/A	N/A	Yes	12	Yes	24.2
46	Floor	H16	384	N/A	N/A	Yes	12	Yes	21.4
47	Floor	H16	389	N/A	N/A	Yes	6	Yes	19.5
48	Floor	H16	536	N/A	N/A	Yes	25	Yes	29.5
49	Floor	H16	337	N/A	N/A	Yes	6	Yes	47.5
50	Floor	H16	1017	N/A	N/A	Yes	0	Yes	61.4
51	Floor	H16	1051	N/A	N/A	Yes	51	Yes	28.6
52	Floor	H16	520	N/A	N/A	Yes	21	Yes	32.6
53	Floor	G16	496	N/A	N/A	Yes	51	Yes	19.4
54	Floor	H16	718	N/A	N/A	Yes	52	Yes	16.2
55	Floor	H16	1800	N/A	N/A	Yes	12	Yes	20.4
56	Floor	H16	1227	N/A	N/A	Yes	29	Yes	16.6
57	Floor	H15	404	N/A	N/A	Yes	24	Yes	27.0
58	Floor	H15	592	N/A	N/A	Yes	52	Yes	27.8
59	Floor	H15	522	N/A	N/A	Yes	24	Yes	14.6
60	Floor	H15	589	N/A	N/A	Yes	9	Yes	26.9
61	Floor	H15	6422	N/A	N/A	Yes	3	Yes	24.1
62	Floor	H15	2130	N/A	N/A	Yes	29	Yes	24.7
63	Floor	G15	392	N/A	N/A	Yes	42	Yes	35.5
64	Floor	H15	602	N/A	N/A	Yes	6	Yes	15.5
65	Floor	H15	972	N/A	N/A	Yes	42	Yes	22.0
66	Floor	H15	692	N/A	N/A	Yes	3	Yes	24.2
67	Floor	H16	1285	N/A	N/A	Yes	21	Yes	23.6
68	Floor	H16	725	N/A	N/A	Yes	30	Yes	19.4
69	Floor	H16	1440	N/A	N/A	Yes	34	Yes	22.5
70	Floor	H16	635	N/A	N/A	Yes	15	Yes	20.4
71	Floor	H16	310	N/A	N/A	Yes	18	Yes	6.2
72	Floor	H16	2080	N/A	N/A	Yes	0	Yes	20.3
73	Floor	H16	715	N/A	N/A	Yes	18	Yes	59.0
74	Floor	H16	728	N/A	N/A	Yes	1	Yes	12.3
75	Floor	H16	765	N/A	N/A	Yes	36	Yes	15.3
76	Floor	H16	420	N/A	N/A	Yes	33	Yes	24.5
77	Floor	G16	635	N/A	N/A	Yes	66	Yes	14.1
78	Floor	G15	1120	N/A	N/A	Yes	29	Yes	21.3
79	Floor	G13	1548	N/A	N/A	Yes	12	Yes	14.5
80	Floor	H13	377	N/A	N/A	Yes	8	Yes	29.9
81	Floor	H13	442	N/A	N/A	Yes	39	Yes	19.0
82	Floor	H15	700	N/A	N/A	Yes	9	Yes	19.1
83	Floor	H15	2150	N/A	N/A	Yes	9	Yes	33.3
84	Floor	H15	425	N/A	N/A	Yes	27	Yes	13.6
85	Floor	H14	834	N/A	N/A	Yes	24	Yes	25.2
86	Floor	J12	685	N/A	N/A	Yes	38	Yes	27.5
87	Floor	J14	470	N/A	N/A	Yes	18	Yes	24.6
88	Floor	J14	402	N/A	N/A	Yes	3	Yes	12.9

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum

66

61

## Investigation Documentation

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
89	Floor	J14	400	N/A	N/A	Yes	59	Yes	16.5
90	Floor	H14	1045	N/A	N/A	Yes	3	Yes	23.4
91	Floor	G12	516	N/A	N/A	Yes	22	Yes	13.3
92	Floor	G12	446	N/A	N/A	Yes	16	Yes	20.6
93	Floor	H12	328	N/A	N/A	Yes	19	Yes	32.4
94	Floor	H12	936	N/A	N/A	Yes	19	Yes	26.4
95	Floor	H12	827	N/A	N/A	Yes	34	Yes	11.1
96	Floor	H12	783	N/A	N/A	Yes	53	Yes	34.6
97	Floor	H12	473	N/A	N/A	Yes	22	Yes	21.3
98	Floor	K13	6144	N/A	N/A	Yes	69	Yes	58.8
99	Floor	K13	484	N/A	N/A	Yes	31	Yes	60.6
100	Floor	J12	477	N/A	N/A	Yes	19	Yes	22.3
101	Floor	J12	470	N/A	N/A	Yes	25	Yes	31.4
102	Floor	J13	590	N/A	N/A	Yes	3	Yes	39.8
103	Floor	J13	359	N/A	N/A	Yes	32	Yes	34.0
104	Floor	K13	342	N/A	N/A	Yes	38	Yes	29.2
105	Floor	K13	982	N/A	N/A	Yes	31	Yes	37.5
106	Floor	J12	978	N/A	N/A	Yes	25	Yes	25.3
107	Floor	J12	478	N/A	N/A	Yes	16	Yes	37.1
108	Floor	J12	475	N/A	N/A	Yes	19	Yes	29.5
109	Floor	J13	526	N/A	N/A	Yes	38	Yes	44.6
110	Floor	J13	1290	N/A	N/A	Yes	13	Yes	55.7
111	Floor	J13	3893	N/A	N/A	Yes	9	Yes	45.7
112	Floor	J13	539	N/A	N/A	Yes	23	Yes	43.9
113	Floor	J13	850	N/A	N/A	Yes	8	Yes	38.1
114	Floor	J13	2800	N/A	N/A	Yes	9	Yes	34.0
115	Floor	J13	543	N/A	N/A	Yes	3	Yes	59.6
116	Floor	J13	577	N/A	N/A	Yes	9	Yes	42.6
117	Floor	J13	475	N/A	N/A	Yes	3	Yes	37.7
118	Floor	J13	400	N/A	N/A	Yes	7	Yes	29.9
119	Floor	J12	800	N/A	N/A	Yes	9	Yes	39.7
120	Floor	J12	700	N/A	N/A	Yes	-5	Yes	17.5
121	Floor	J14	345	N/A	N/A	Yes	10	Yes	21.5
122	Floor	K15	366	N/A	N/A	Yes	2	Yes	23.1
123	Floor	L14	704	N/A	N/A	Yes	9	Yes	31.0
124	Floor	L14	704	N/A	N/A	Yes	11	Yes	27.4
125	Floor	J12	371	N/A	N/A	Yes	3	Yes	16.4
126	Floor	J12	498	N/A	N/A	Yes	9	Yes	28.8
127	Floor	K12	755	N/A	N/A	Yes	2	Yes	26.2
128	Floor	K12	342	N/A	N/A	Yes	5	Yes	23.3
129	Floor	K12	685	N/A	N/A	Yes	5	Yes	19.9
130	Floor	K12	386	N/A	N/A	Yes	11	Yes	44.9
131	Floor	K12	450	N/A	N/A	Yes	1	Yes	23.3
132	Floor	H13	433	N/A	N/A	Yes	7	Yes	22.0
133	Floor	K16	720	N/A	N/A	Yes	4	Yes	27.5
134	Floor	H16	400	N/A	N/A	Yes	3	Yes	33.6
135	Floor	H16	500	N/A	N/A	Yes	6	Yes	27.7

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum

69

61

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 45

Nbr QC Required: 6

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 45

Nbr QC Performed: 6

#### Alpha

Maximum: 46.6 dpm/100cm<sup>2</sup>  
Minimum: -12.7 dpm/100cm<sup>2</sup>  
Mean: 10.8 dpm/100cm<sup>2</sup>  
Standard Deviation: 13.1  
QC Maximum: 17.5 dpm/100cm<sup>2</sup>  
QC Minimum: 9.3 dpm/100cm<sup>2</sup>  
QC Mean: 13.6 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 45

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 45

#### Alpha

Maximum: 9.0 dpm/100cm<sup>2</sup>  
Minimum: -0.3 dpm/100cm<sup>2</sup>  
Mean: 1.2 dpm/100cm<sup>2</sup>  
Standard Deviation: 1.8  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 15

Nbr Biased Required: 0

Nbr Random Collected: 15

Nbr Biased Collected: 0

#### Uranium

Maximum: NA dpm/100cm<sup>2</sup>  
Minimum: NA dpm/100cm<sup>2</sup>  
Mean: NA dpm/100cm<sup>2</sup>  
Standard Deviation: NA  
Uranium DCGL<sub>w</sub>: 5,000 dpm/100cm<sup>2</sup>  
Uranium DCGL<sub>EMC</sub>: 15,000 dpm/100cm<sup>2</sup>

#### Transuranic

Maximum: 37 dpm/100cm<sup>2</sup>  
Minimum: -7 dpm/100cm<sup>2</sup>  
Mean: 8 dpm/100cm<sup>2</sup>  
Standard Deviation: 10  
Transuranic DCGL<sub>w</sub>: 100 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300 dpm/100cm<sup>2</sup>

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.



Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	712600	08/01/04	Electra	4177	DP-6	08/25/04	0.223	NA	48.0	NA	T/S
2	712193	08/01/04	Electra	1100	DP-6	09/02/04	0.214	NA	48.0	NA	T/S
3	712193	08/01/04	Electra	1240	DP-6	01/22/05	0.212	NA	48.0	NA	T/S
4	712193	08/01/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
5	712193	08/01/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
6	712193	08/03/04	Electra	1259	DP-6	10/22/04	0.224	NA	48.0	NA	T/S
7	712193	08/03/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
8	509552	10/05/04	Electra	4413	DP-6	03/09/05	0.208	NA	48.0	NA	T/S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707012PRP-N001	5	1.5	N/A	
707012PRP-N002	5	0.0	N/A	
707012PRP-N003	5	1.5	N/A	
707012PRP-N004	4	-0.3	N/A	
707012PRP-N005	7	1.2	N/A	
707012PRP-N006	4	-0.3	N/A	
707012PRP-N007	4	-0.3	N/A	
707012PRP-N008	5	3.0	N/A	
707012PRP-N009	4	-0.3	N/A	
707012PRP-N010	4	1.2	N/A	
707012PRP-N011	5	1.5	N/A	
707012PRP-N012	4	-0.3	N/A	
707012PRP-N013	4	-0.3	N/A	
707012PRP-N014	5	9.0	N/A	
707012PRP-N015	5	3.0	N/A	

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

## Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707012PBP-N016	4	-0.3	N/A	
707012PBP-N017	4	2.7	N/A	
707012PBP-N018	5	1.5	N/A	
707012PBP-N019	5	0.0	N/A	
707012PBP-N020	4	2.7	N/A	
707012PBP-N021	4	-0.3	N/A	
707012PBP-N022	5	0.0	N/A	
707012PBP-N023	5	0.0	N/A	
707012PBP-N024	5	0.0	N/A	
707012PBP-N025	5	1.5	N/A	
707012PBP-N026	4	1.2	N/A	
707012PBP-N027	5	3.0	N/A	
707012PBP-N028	4	-0.3	N/A	
707012PBP-N029	5	4.5	N/A	
707012PBP-N030	4	1.2	N/A	
707012PBP-N031	4	-0.3	N/A	
707012PBP-N032	5	1.5	N/A	
707012PBP-N033	5	1.5	N/A	
707012PBP-N034	5	3.0	N/A	
707012PBP-N035	4	-0.3	N/A	
707012PBP-N036	5	1.5	N/A	
707012PBP-N037	5	4.5	N/A	
707012PBP-N038	4	-0.3	N/A	
707012PBP-N039	4	2.7	N/A	
707012PBP-N040	5	0.0	N/A	
707012PBP-N041	4	-0.3	N/A	
707012PBP-N042	4	1.2	N/A	

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707012PBP-N043	4	-0.3	N/A	
707012PBP-N044	4	-0.3	N/A	
707012PBP-N045	5	0.0	N/A	
707012PBP-N046	5	0.0	N/A	
707012PBP-N047	4	-0.3	N/A	
707012PBP-N048	4	2.7	N/A	
707012PBP-N049	5	0.0	N/A	
707012PBP-N050	5	0.0	N/A	
707012PBP-N051	5	4.5	N/A	
707012PBP-N052	4	5.7	N/A	
707012PBP-N053	4	2.7	N/A	
707012PBP-N054	5	1.5	N/A	
707012PBP-N055	4	1.2	N/A	
707012PBP-N056	4	-0.3	N/A	
707012PBP-N057	5	1.5	N/A	
707012PBP-N058	5	0.0	N/A	
707012PBP-N059	5	0.0	N/A	
707012PBP-N060	5	1.5	N/A	

Comments:

95

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707 2nd Floor, Room 220 West quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707012PRP-N001	2	1.9	N/A	
707012PRP-N002	2	0.5	N/A	
707012PRP-N003	2	-5.6	N/A	
707012PRP-N004	2	1.9	N/A	
707012PRP-N005	6	16.4	N/A	
707012QRP-N005	8	17.5	N/A	
707012PRP-N006	3	24.2	N/A	
707012PRP-N007	2	30.0	N/A	
707012PRP-N008	2	9.9	N/A	
707012QRP-N008	8	9.3	N/A	
707012PRP-N009	2	28.6	N/A	
707012PRP-N010	8	40.8	N/A	
707012PRP-N011	8	15.3	N/A	
707012PRP-N012	3	0.7	N/A	
707012QRP-N012	8	10.8	N/A	
707012PRP-N013	2	11.3	N/A	
707012PRP-N014	2	11.3	N/A	
707012PRP-N015	2	6.6	N/A	
707012QRP-N016	8	15.6	N/A	
707012QRP-N018	8	17.5	N/A	
707012QRP-N019	8	10.8	N/A	

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

## Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707012PBP-N016	2	13.9	N/A	
707012PBP-N017	2	12.0	N/A	
707012PBP-N018	2	20.0	N/A	
707012PBP-N019	2	7.4	N/A	
707012PBP-N020	2	1.3	N/A	
707012PBP-N021	2	38.7	N/A	
707012PBP-N022	2	27.9	N/A	
707012PBP-N023	2	7.4	N/A	
707012PBP-N024	2	20.0	N/A	
707012PBP-N025	2	4.6	N/A	
707012PBP-N026	2	7.4	N/A	
707012PBP-N027	2	-2.0	N/A	
707012PBP-N028	2	46.6	N/A	
707012PBP-N029	2	16.7	N/A	
707012PBP-N030	2	4.6	N/A	
707012PBP-N031	2	46.6	N/A	
707012PBP-N032	2	-3.4	N/A	
707012PBP-N033	2	1.3	N/A	
707012PBP-N034	2	9.2	N/A	
707012PBP-N035	1	33.3	N/A	
707012PBP-N036	1	0.5	N/A	
707012PBP-N037	1	19.8	N/A	
707012PBP-N038	1	10.9	N/A	
707012PBP-N039	1	15.3	N/A	
707012PBP-N040	2	-12.7	N/A	
707012PBP-N041	2	7.4	N/A	
707012PBP-N042	2	-0.1	N/A	

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707 - 2nd Floor, Room 220 West quadrant

## Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707012PBP-N043	2	10.6	N/A	
707012PBP-N044	2	4.6	N/A	
707012PBP-N045	2	12.0	N/A	
707012PBP-N046	1	-3.9	N/A	
707012PBP-N047	1	12.6	N/A	
707012PBP-N048	1	-5.3	N/A	
707012PBP-N049	1	10.9	N/A	
707012PBP-N050	1	8.2	N/A	
707012PBP-N051	1	6.4	N/A	
707012PBP-N052	1	3.7	N/A	
707012PBP-N053	1	-3.9	N/A	
707012PBP-N054	1	6.4	N/A	
707012PBP-N055	1	-7.1	N/A	
707012PBP-N056	1	10.9	N/A	
707012PBP-N057	1	-5.3	N/A	
707012PBP-N058	1	-0.8	N/A	
707012PBP-N059	1	23.0	N/A	
707012PBP-N060	1	19.8	N/A	

Comments: A 100% scan was performed on the accessible floor surfaces, a 25% scan was performed on the lower walls, and >10% scan was performed on the overhead surfaces. All values <300 dpm/100cm<sup>2</sup> after remediation.

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
001.001 1 Floor	U234 U235 U238 Pu239/240 Am241	NA NA NA 0.1020 0.0540	NA NA NA 0.1400 0.1040	28.51	26.3	NA NA NA 4 2	NA NA NA 5 4	Uranium NA Transuranic 6
002.001 2 Floor	U234 U235 U238 Pu239/240 Am241	NA NA NA 0.1550 0.0270	NA NA NA 0.1600 0.1940	30.66	26.3	NA NA NA 6 1	NA NA NA 6 8	Uranium NA Transuranic 7
003.001 3 Floor	U234 U235 U238 Pu239/240 Am241	NA NA NA 0.0000 0.0060	NA NA NA 0.1550 0.1520	50.92	26.3	NA NA NA 0 0	NA NA NA 10 10	Uranium NA Transuranic 0
004.001 4 Floor	U234 U235 U238 Pu239/240 Am241	NA NA NA 0.1190 0.0010	NA NA NA 0.0930 0.2350	30.05	26.3	NA NA NA 5 0	NA NA NA 4 9	Uranium NA Transuranic 5
005.001 5 Floor	U234 U235 U238 Pu239/240 Am241	NA NA NA 1.0000 0.1960	NA NA NA 0.1200 0.1060	23.85	26.3	NA NA NA 31 6	NA NA NA 4 3	Uranium NA Transuranic 37
006.001 6 Floor	U234 U235 U238 Pu239/240 Am241	NA NA NA 0.1700 0.1070	NA NA NA 0.1930 0.0990	24.60	26.3	NA NA NA 6 3	NA NA NA 6 3	Uranium NA Transuranic 9
007.001 7 Floor	U234 U235 U238 Pu239/240 Am241	NA NA NA 0.0120 0.0430	NA NA NA 0.1470 0.1300	32.07	26.3	NA NA NA 1 2	NA NA NA 6 6	Uranium NA Transuranic 2

Comments:



Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
008.001 8 Floor	U234	NA	NA	49.76	26.3	NA	NA	Uranium NA Transuranic 12
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1400	0.1760			9	12	
	Am241	0.0390	0.1170			3	8	
009.001 9 Floor	U234	NA	NA	17.60	26.3	NA	NA	Uranium NA Transuranic 0
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0000	0.1420			0	3	
	Am241	0.0000	0.1130			0	3	
011.001 11 Wall	U234	NA	NA	12.58	26.3	NA	NA	Uranium NA Transuranic 4
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1510	0.1620			3	3	
	Am241	0.0950	0.1330			2	2	
012.001 12 Wall	U234	NA	NA	9.18	26.3	NA	NA	Uranium NA Transuranic 2
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.1510	0.1620			2	2	
	Am241	0.0330	0.0980			0	1	
001.001 21 Biased floor RIN# 04C0032	U234	NA	NA	271.60	26.3	NA	NA	Uranium NA Transuranic 20
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0687	0.2300			24	82	
	Am241	-0.0116	0.1500			-4	53	
002.001 22 Biased floor RIN# 04C0032	U234	NA	NA	146.80	26.3	NA	NA	Uranium NA Transuranic -7
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	-0.0291	0.2470			-6	47	
	Am241	-0.0074	0.1640			-1	32	
003.001 23 Biased Floor RIN# 04C0032	U234	NA	NA	64.43	26.3	NA	NA	Uranium NA Transuranic 13
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0616	0.0923			5	8	
	Am241	0.0871	0.0871			7	7	

160

Survey Area: B

Survey Unit: 707012

Building: 707

Description: B707, 2nd Floor, Room 220 West quadrant

## Media Samples Data Sheet

Site Sample ID / Nbr Description	Nuclide	Sample (pCi/g)	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
004.001 24 Biased Floor RIN# 04C0032	U234	NA	NA	48.04	26.3	NA	NA	Uranium NA Transuranic 4
	U235	NA	NA			NA	NA	
	U238	NA	NA			NA	NA	
	Pu239/240	0.0093	0.2720			1	17	
	Am241	0.0505	0.1520			3	10	

101

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707012

Classification: 2

Building: 707

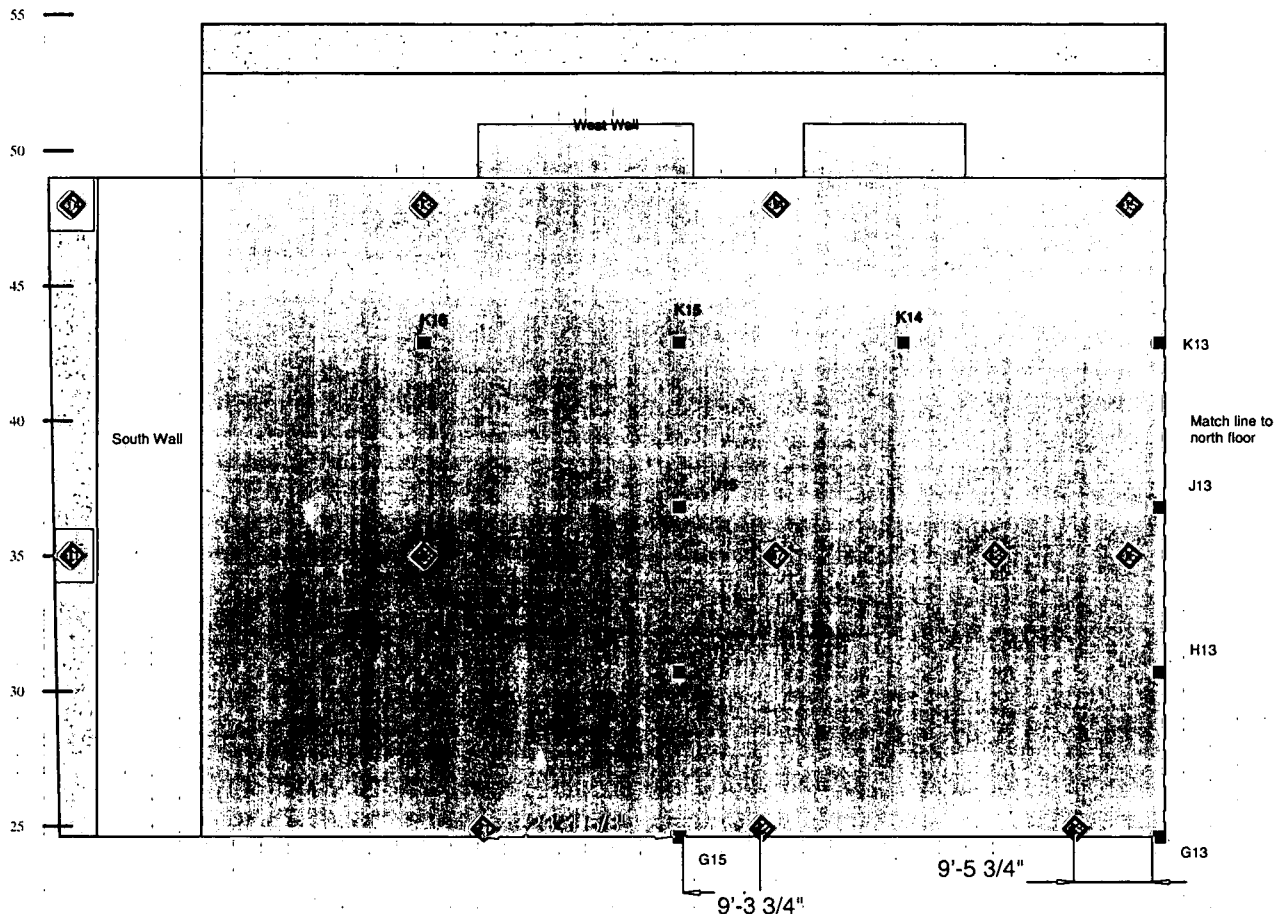
Survey Unit Description: Room 220 (west side)

Total Floor Area: 1287 sq. m

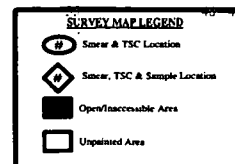
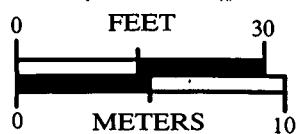
Total Area: 3639 sq. m

Grid Size: 13m x 13m

## SURVEY UNIT 707012 - MAP 1 OF 4



Scanned Area



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707012

Classification: 2

Building: 707

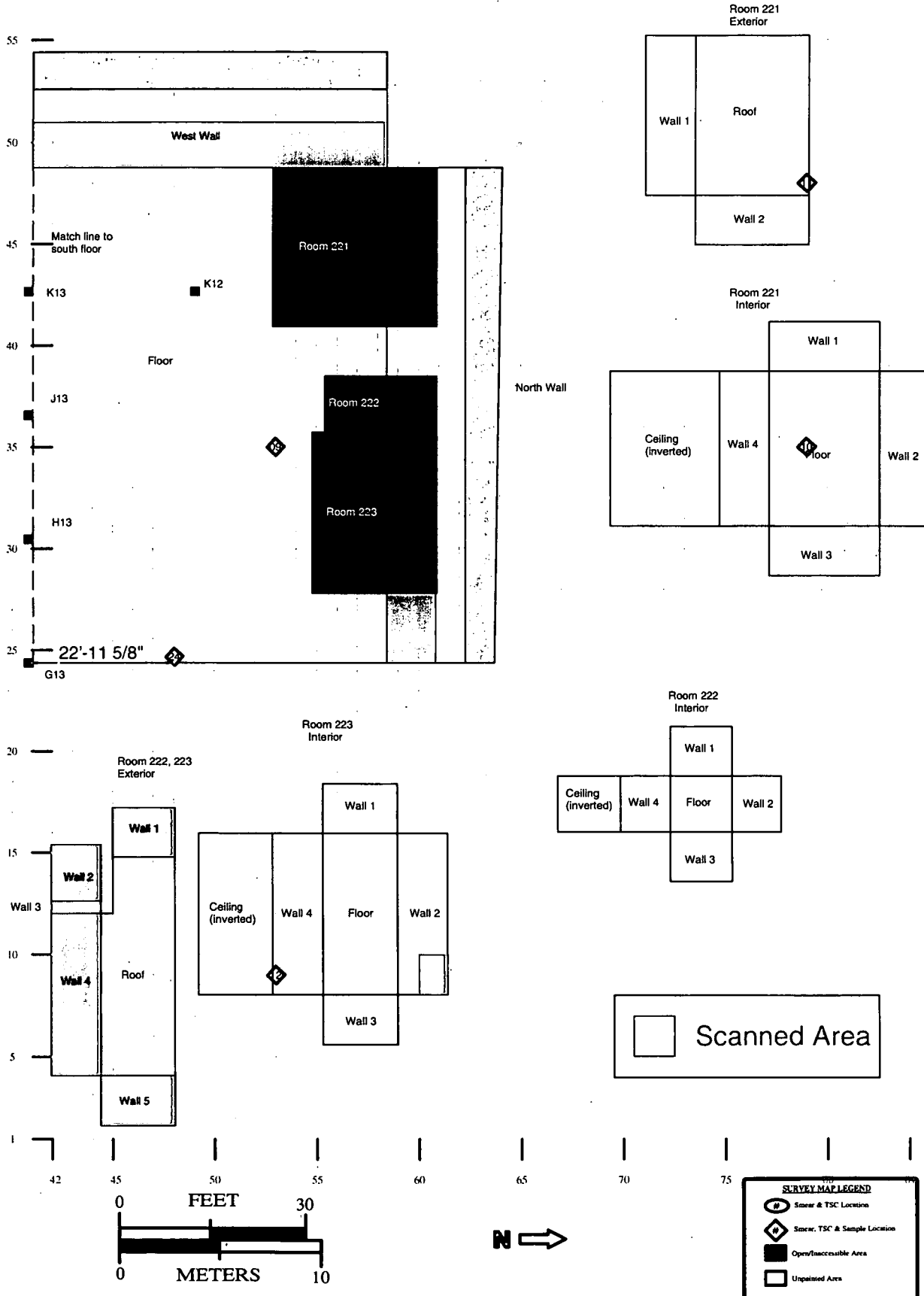
Survey Unit Description: Room 220 (west side)

Total Floor Area: 1287 sq. m

Total Area: 3639 sq. m

Grid Size: 13m x 13m

## SURVEY UNIT 707012 - MAP 2 OF 4



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707012

Classification: 2

Building: 707

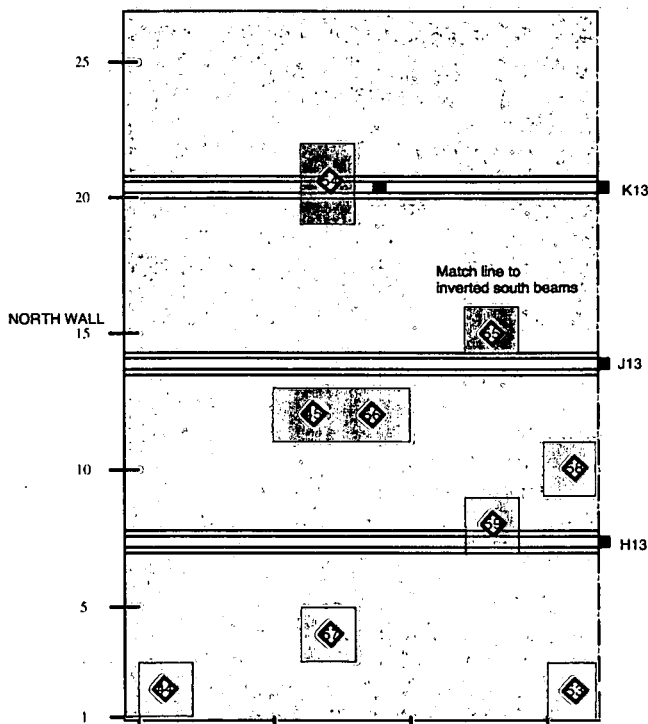
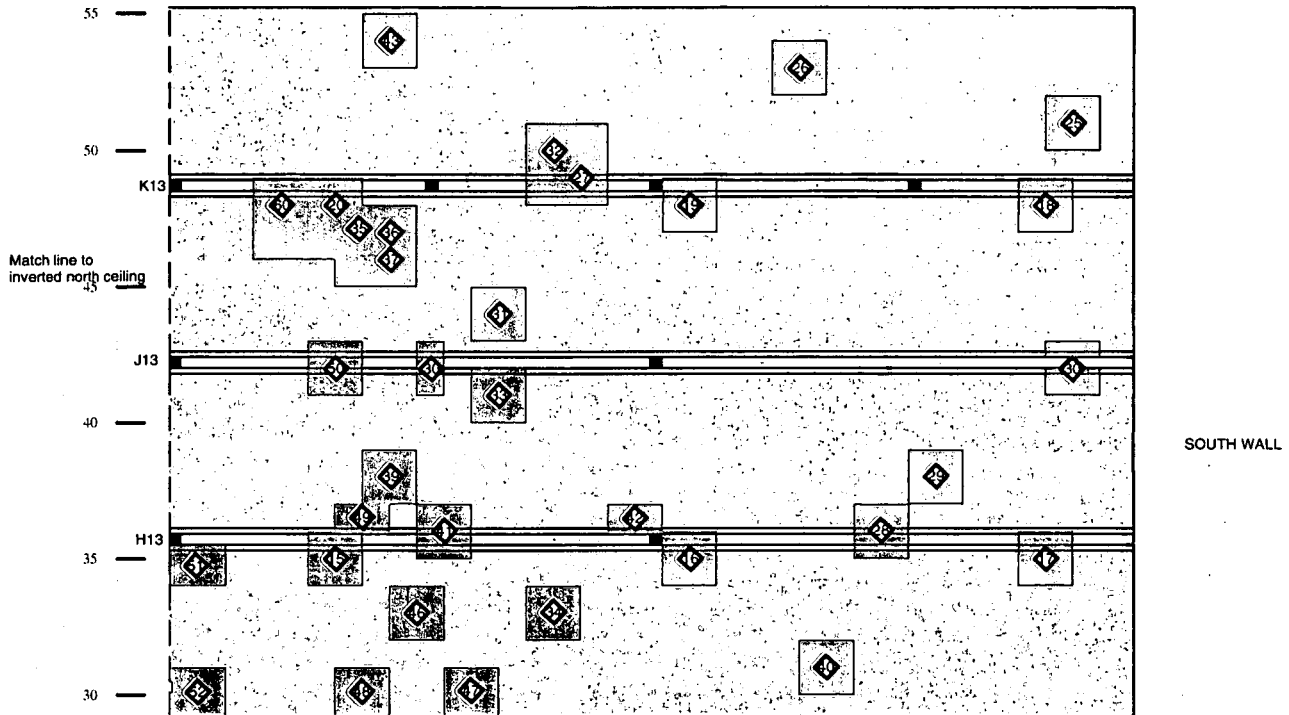
Survey Unit Description: Room 220 (west side)

Total Floor Area: 1287 sq. m

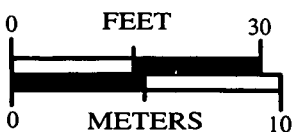
Total Area: 3639 sq. m

Grid Size: 13m x 13m

## SURVEY UNIT 707012 - MAP 3 OF 4



Scanned Area



SURVEY MAP LEGEND	
	Screw & TSC Location
	Screw, TSC & Sample Location
	Open/Inaccessible Area
	Unpainted Area

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707012

Classification: 2

Building: 707

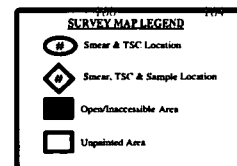
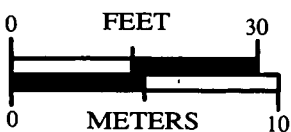
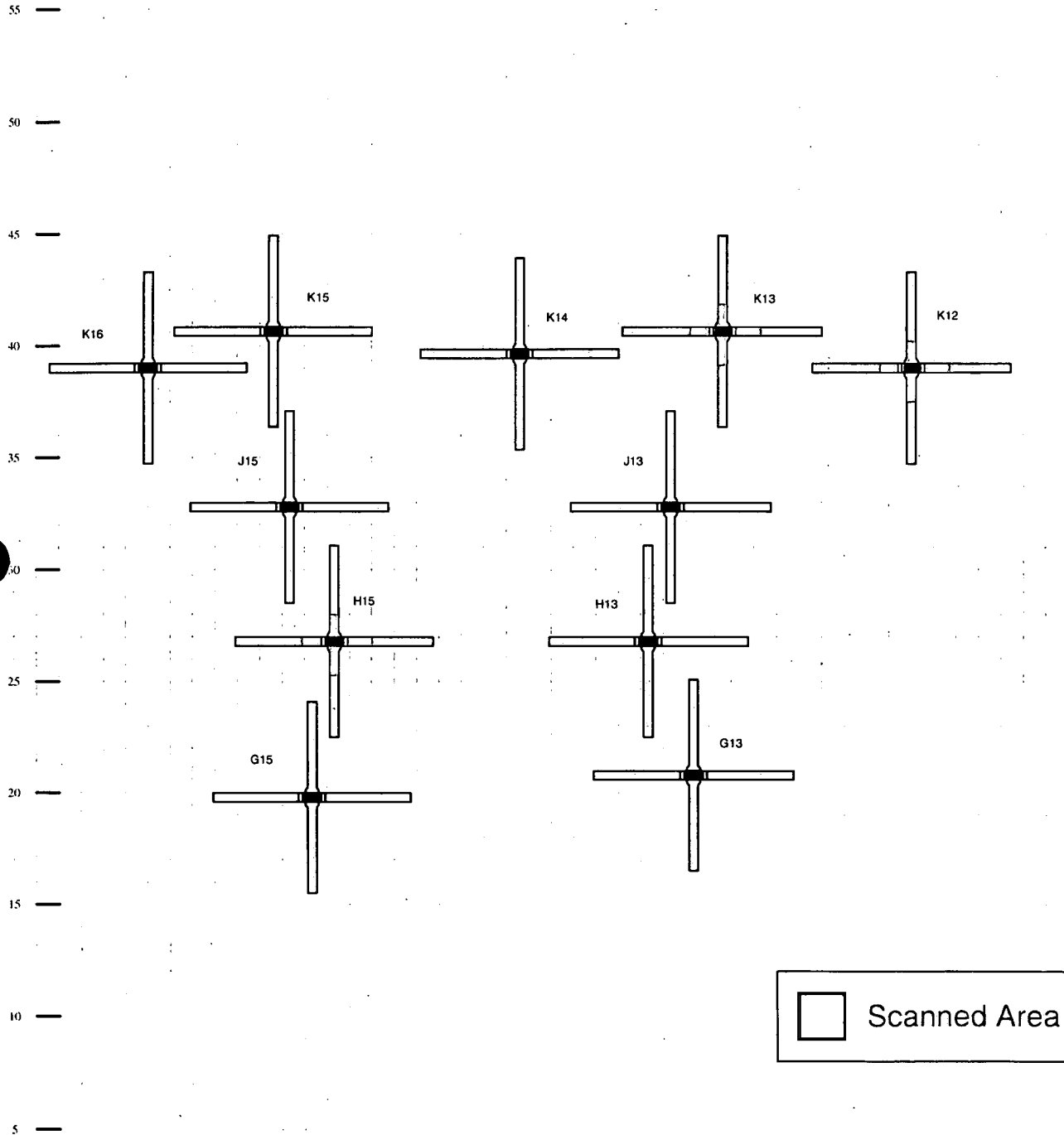
Survey Unit Description: Room 220 (west side)

Total Floor Area: 1287 sq. m

Total Area: 3639 sq. m

Grid Size: 13m x 13m

## SURVEY UNIT 707012 - MAP 4 OF 4



105

ATTACHMENT B6

Survey Unit 707016 Survey Data and Maps

# Investigation Documentation

Survey Unit: 707016

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	M3	767	181	810	Yes	149	No	N/A
2	Floor	M2	360	58	260	Yes	27	No	18.3
3	Floor	M2	800	170	761	Yes	15	No	21.9
4	Floor	M4	400	76	341	Yes	27	No	21.9
5	Floor	M4	452	84	377	Yes	164	No	N/A
6	Floor	M3	275	45	202	Yes	49	No	N/A
7	Floor	M3	390	76	341	Yes	57	No	N/A
8	Floor	M4	332	150	673	Yes	15	No	N/A

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum 164.5

21.9



Survey Area: C

Survey Unit: 707016

Building: 707

Description: 2nd floor annex floor - column lines L-M, 1-5.4

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 40

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 40

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 78.0 dpm/100cm<sup>2</sup>

Minimum: -41.3 dpm/100cm<sup>2</sup>

Mean: 15.3 dpm/100cm<sup>2</sup>

Standard Deviation: 26.3

QC Maximum: 45.4 dpm/100cm<sup>2</sup>

QC Minimum: -6.0 dpm/100cm<sup>2</sup>

QC Mean: 19.7 dpm/100cm<sup>2</sup>

Transuranic DCGLW: 100.0 dpm/100cm<sup>2</sup>

Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 40

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 40

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 8.7 dpm/100cm<sup>2</sup>

Minimum: -0.3 dpm/100cm<sup>2</sup>

Mean: 0.7 dpm/100cm<sup>2</sup>

Standard Deviation: 1.8

Transuranic DCGLW: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: C

Survey Unit: 707016

Building: 707

Description: 2nd floor annex floor - column lines L-M, 1-5.4

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	513090	10/03/04	Electra	1194	DP-6	01/14/05	0.207	NA	48.0	NA	T
2	510805	10/03/04	Electra	4396	DP-6	02/20/05	0.214	NA	48.0	NA	T
3	513090	10/03/04	SAC-4	837	NA	12/09/04	0.333	NA	10.0	NA	R
4	513090	10/03/04	SAC-4	1196	NA	01/28/05	0.333	NA	10.0	NA	R
5	513090	10/03/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
6	516375	10/08/04	Electra	1240	DP-6	03/21/05	0.222	NA	48.0	NA	Q

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C

Survey Unit: 707016

Building: 707

Description: 2nd floor annex floor - column lines L-M, 1-5/4

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707016PRP-N001	3	0.0	N/A	
707016PRP-N002	4	-0.3	N/A	
707016PRP-N003	5	0.0	N/A	
707016PRP-N004	3	0.0	N/A	
707016PRP-N005	4	-0.3	N/A	
707016PRP-N006	5	0.0	N/A	
707016PRP-N007	3	0.0	N/A	
707016PRP-N008	4	-0.3	N/A	
707016PRP-N009	5	0.0	N/A	
707016PRP-N010	3	0.0	N/A	
707016PRP-N011	4	-0.3	N/A	
707016PRP-N012	5	0.0	N/A	
707016PRP-N013	3	0.0	N/A	
707016PRP-N014	4	8.7	N/A	
707016PRP-N015	5	0.0	N/A	
707016PRP-N016	3	0.0	N/A	
707016PRP-N017	4	2.7	N/A	
707016PRP-N018	5	3.0	N/A	
707016PRP-N019	3	3.0	N/A	
707016PRP-N020	4	-0.3	N/A	
707016PRP-N021	5	3.0	N/A	
707016PRP-N022	3	0.0	N/A	
707016PRP-N023	4	-0.3	N/A	
707016PRP-N024	5	0.0	N/A	
707016PRP-N025	3	0.0	N/A	
707016PRP-N026	4	-0.3	N/A	
707016PRP-N027	5	0.0	N/A	
707016PRP-N028	3	0.0	N/A	
707016PRP-N029	4	-0.3	N/A	

Survey Area: C

Survey Unit: 707016

Building: 707

Description: 2nd floor annex floor column lines L-M, 1-5.4

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707016PRP-N030	5	3.0	N/A	
707016PRP-N031	3	0.0	N/A	
707016PRP-N032	4	2.7	N/A	
707016PRP-N033	5	0.0	N/A	
707016PRP-N034	3	0.0	N/A	
707016PRP-N035	4	-0.3	N/A	
707016PRP-N036	5	0.0	N/A	
707016PRP-N037	3	0.0	N/A	
707016PRP-N038	4	-0.3	N/A	
707016PRP-N039	5	3.0	N/A	
707016PRP-N040	3	3.0	N/A	

Comments:

Survey Area: C

Survey Unit: 707016

Building: 707

Description: 2nd floor annex floor - column lines L-M, 1-5, 4

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707016PRP-N001	1	-15.7	N/A	
707016PRP-N002	2	-4.3	N/A	
707016PRP-N003	1	-2.7	N/A	
707016QRP-N003	6	-6.0	N/A	
707016PRP-N004	2	8.3	N/A	
707016PRP-N005	1	32.6	N/A	
707016PRP-N006	2	5.1	N/A	
707016PRP-N007	1	32.6	N/A	
707016PRP-N008	2	20.5	N/A	
707016PRP-N009	1	10.4	N/A	
707016PRP-N010	2	20.5	N/A	
707016PRP-N011	1	0.7	N/A	
707016PRP-N012	2	11.1	N/A	
707016PRP-N013	1	26.3	N/A	
707016PRP-N014	2	14.4	N/A	
707016PRP-N015	1	-38.0	N/A	
707016PRP-N016	2	-1.0	N/A	
707016PRP-N017	1	49.0	N/A	
707016PRP-N018	2	-16.9	N/A	
707016PRP-N019	1	39.3	N/A	
707016PRP-N020	2	-1.0	N/A	
707016PRP-N021	1	20.0	N/A	
707016PRP-N022	2	11.1	N/A	
707016PRP-N023	1	26.3	N/A	
707016PRP-N024	2	-4.3	N/A	
707016PRP-N025	1	74.6	N/A	
707016QRP-N025	2	45.4	N/A	

Survey Area: C

Survey Unit: 707016

Building: 707

Description: 2nd floor annex floor - column lines L-M, 1-5.4

**Random/QC Total Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707016PRP-N026	2	5.1	N/A	
707016PRP-N027	1	39.3	N/A	
707016PRP-N028	2	-1.0	N/A	
707016PRP-N029	1	39.3	N/A	
707016PRP-N030	2	8.3	N/A	
707016PRP-N031	1	78.0	N/A	
707016PRP-N032	2	17.7	N/A	
707016PRP-N033	1	-41.3	N/A	
707016PRP-N034	2	55.1	N/A	
707016PRP-N035	1	16.6	N/A	
707016PRP-N036	2	20.5	N/A	
707016PRP-N037	1	-38.0	N/A	
707016PRP-N038	2	33.1	N/A	
707016PRP-N039	1	32.6	N/A	
707016PRP-N040	2	27.0	N/A	

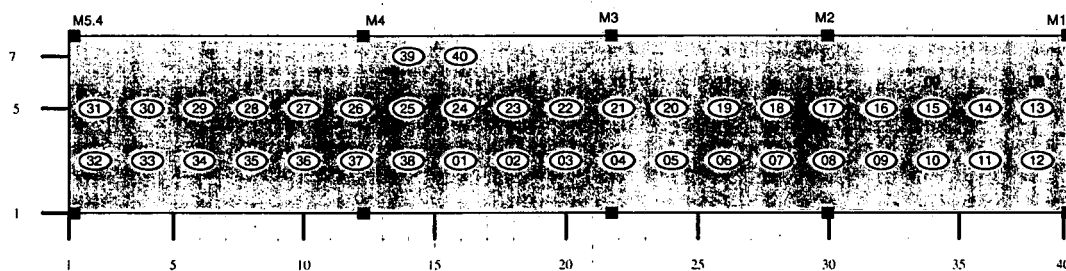
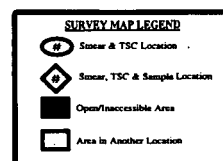
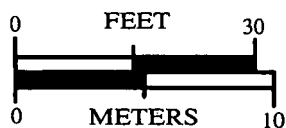
Comments: Scanned 100% of the accessible floor surfaces. All values <300 dpm/100 cm<sup>2</sup>.

**Classification: 1**

**Survey Unit Description: Second Floor- Annex**

**Total Floor Area: 261 sq. m      Total Area: 261 sq. m      Random Start Grid Size: 4 x 4 sq. m**

SURVEY UNIT 707016 - MAP 1 OF 1

 Scanned Area

## Investigation Documentation

Survey Unit: 707017

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	N1	688	119	534	Yes	136	No	N/A

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum 136.2

N/A

115



ATTACHMENT B7

Survey Unit 707017 Survey Data and Maps

Survey Area: C

Survey Unit: 707017

Building: 707

Description: B707 2nd floor annex - between columns M-N - 1-5-4

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 5

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

Nbr QC Performed: 2

#### Alpha

Maximum: 49.8 dpm/100cm<sup>2</sup>

Minimum: -7.3 dpm/100cm<sup>2</sup>

Mean: 16.7 dpm/100cm<sup>2</sup>

Standard Deviation: 15.5

QC Maximum: 6.3 dpm/100cm<sup>2</sup>

QC Minimum: 3.1 dpm/100cm<sup>2</sup>

QC Mean: 4.7 dpm/100cm<sup>2</sup>

Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>

Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 5

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

#### Alpha

Maximum: 7.2 dpm/100cm<sup>2</sup>

Minimum: -1.2 dpm/100cm<sup>2</sup>

Mean: 1.1 dpm/100cm<sup>2</sup>

Standard Deviation: 2.1

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: C

Survey Unit: 707017

Building: 707

Description: B707 2nd floor annex - between columns M-N - 1-5.4

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	701564	08/15/04	Electra	3977	DP-6	01/31/05	0.212	NA	48.0	NA	T/S
2	711749	08/15/04	Electra	4398	DP-6	01/29/05	0.213	NA	48.0	NA	T
3	600638	08/15/04	SAC-4	1411	NA	09/29/04	0.333	NA	10.0	NA	R
4	600638	08/15/04	SAC-4	1479	NA	09/29/04	0.333	NA	10.0	NA	R
5	600638	08/15/04	SAC-4	951	NA	10/03/04	0.333	NA	10.0	NA	R
6	600638	08/15/04	SAC-4	1051	NA	11/06/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C

Survey Unit: 707017

Building: 707

Description: B707 2nd floor annex - between columns M-N - 1-5.4

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707017PRP-N001	3	-0.3	N/A	
707017PRP-N002	4	2.4	N/A	
707017PRP-N003	5	-0.3	N/A	
707017PRP-N004	6	0.3	N/A	
707017PRP-N005	3	-0.3	N/A	
707017PRP-N006	4	2.4	N/A	
707017PRP-N007	5	7.2	N/A	
707017PRP-N008	6	-1.2	N/A	
707017PRP-N009	3	-0.3	N/A	
707017PRP-N010	4	2.4	N/A	
707017PRP-N011	5	1.2	N/A	
707017PRP-N012	6	-1.2	N/A	
707017PRP-N013	3	4.2	N/A	
707017PRP-N014	4	3.9	N/A	
707017PRP-N015	5	-0.3	N/A	

Survey Area: C

Survey Unit: 707017

Building: 707

Description: B707, 2nd floor annex - between columns M-N - 1-5.4

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707017PBP-N016	6	0.3	N/A	
707017PBP-N017	3	-0.3	N/A	
707017PBP-N018	4	-0.6	N/A	
707017PBP-N019	5	1.2	N/A	
707017PBP-N020	6	0.3	N/A	

Comments:

Survey Area: C

Survey Unit: 707017

Building: 707

Description: B707 2nd floor annex - between columns M-N - 1-5.4

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707017PRP-N001	2	27.4	N/A	
707017PRP-N002	2	12.0	N/A	
707017PRP-N003	2	36.8	N/A	
707017PRP-N004	2	21.3	N/A	
707017PRP-N005	2	5.4	N/A	
707017PRP-N006	1	8.8	N/A	
707017PRP-N007	1	33.8	N/A	
707017PRP-N008	1	-0.6	N/A	
707017PRP-N009	1	-3.9	N/A	
707017QRP-N009	2	3.1	N/A	
707017PRP-N010	1	2.7	N/A	
707017PRP-N011	1	31.0	N/A	
707017PRP-N012	1	-3.9	N/A	
707017PRP-N013	1	21.5	N/A	
707017PRP-N014	1	49.8	N/A	
707017PRP-N015	1	12.1	N/A	
707017QRP-N015	2	6.3	N/A	

**Survey Area:** C**Survey Unit:** 707017**Building:** 707**Description:** B707/2nd floor annex - between columns M-N - 1-5/4

### Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707017PBP-N016	1	27.2	N/A	
707017PBP-N017	2	26.9	N/A	
707017PBP-N018	1	17.7	N/A	
707017PBP-N019	2	14.3	N/A	
707017PBP-N020	1	-7.3	N/A	

**Comments:** 100% of accessible floor surfaces were scanned. All values <300 dpm/100 cm2 after investigations were complete.

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: C

Survey Unit: 707017

Classification: 2

Building: 707

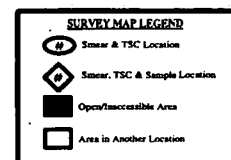
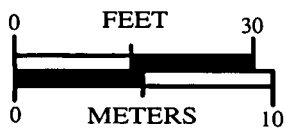
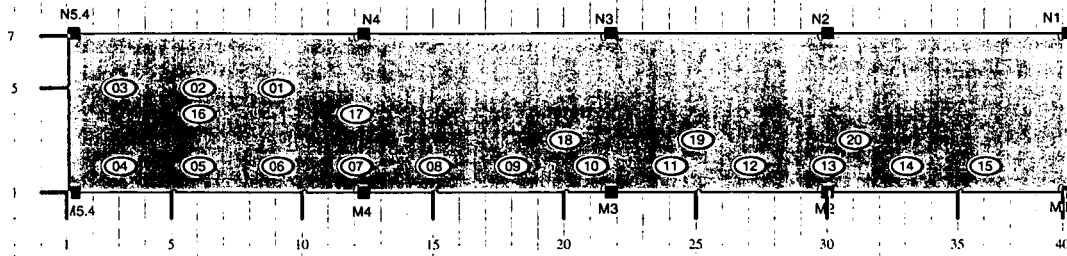
Survey Unit Description: Second floor- Annex

Total Floor Area: 234 sq. m

Total Area: 234 sq. m

Random Start Grid Size: 3 x 3 sq. m

## **SURVEY UNIT 707017 - MAP 1 OF 1**





ATTACHMENT B8

Survey Unit 707018 Survey Data and Maps

# Investigation Documentation

Survey Unit: 707018

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	N2	200	33	158	Yes	152	Yes	46
2	Floor	N2	200	34	164	Yes	112	Yes	40
3	Floor	N2	244	46	223	Yes	173	Yes	48
4	Floor	N2	157	26	127	Yes	79	Yes	38
5	Floor	N2	300	0	0	No	39	Yes	23
6	Floor	N2	180	29	141	Yes	75	Yes	50
7	Floor	N2	230	46	222	Yes	12	Yes	32
8	Floor	N2	152	25	120	Yes	42	Yes	26
9	Floor	N3	160	32	155	Yes	60	Yes	39
10	Floor	N3	498	91	441	Yes	51	Yes	35
11	Floor	N3	360	67	322	Yes	73	Yes	26
12	Floor	N3	135	24	114	Yes	114	No	N/A
13	Floor	N3	435	80	386	Yes	77	No	26
14	Floor	N3	190	37	177	Yes	177	No	N/A
15	Floor	N4	300	57	250	Yes	250	No	N/A
16	Floor	N4	350	71	314	Yes	157	No	53
17	Floor	N5	2000	431	1899	Yes	19	No	24
18	Floor	N5	600	142	624	Yes	90	No	31
19	Floor	N5	300	57	252	Yes	252	No	N/A
20	Floor	N5	320	63	278	Yes	278	No	N/A
21	Floor	O4	300	62	272	Yes	272	No	N/A
22	Floor	2	300	47	207	Yes	207	No	N/A

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum

277.5

52.8

**Survey Area:** C**Survey Unit:** 707018**Building:** 707**Description:** B707/2nd floor annex - between columns N-O - 1:5.4

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 5

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

Nbr QC Performed: 2

#### Alpha

Maximum: 55.5 dpm/100cm<sup>2</sup>Minimum: 0.8 dpm/100cm<sup>2</sup>Mean: 25.0 dpm/100cm<sup>2</sup>

Standard Deviation: 15.3

QC Maximum: 20.6 dpm/100cm<sup>2</sup>QC Minimum: 17.4 dpm/100cm<sup>2</sup>QC Mean: 19.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 5

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

#### Alpha

Maximum: 2.4 dpm/100cm<sup>2</sup>Minimum: 0.9 dpm/100cm<sup>2</sup>Mean: 1.0 dpm/100cm<sup>2</sup>

Standard Deviation: 0.3

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 15

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: C

Survey Unit: 707018

Building: 707

Description: B707 2nd floor annex between columns N-O 1-5.4

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	601035	08/15/04	Electra	4397	DP-6	09/17/04	0.202	NA	48.0	NA	T
2	600125	08/15/04	Electra	4413	DP-6	09/20/04	0.203	NA	48.0	NA	T
3	701418	08/15/04	Electra	2172	DP-6	12/30/04	0.211	NA	48.0	NA	T
4	701143	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
5	600865	08/15/04	SAC-4	1284	NA	01/29/05	0.333	NA	10.0	NA	R
6	513185	10/08/04	Electra	3977	DP-6	01/31/05	0.213	NA	48.0	48.0	I

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: C

Survey Unit: 707018

Building: 707

Description: B707 2nd floor annex - between columns N-O - 1-5.4

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707018PRP-N001	4	0.9	N/A	
707018PRP-N002	4	0.9	N/A	
707018PRP-N003	4	0.9	N/A	
707018PRP-N004	4	0.9	N/A	
707018PRP-N005	4	0.9	N/A	
707018PRP-N006	4	0.9	N/A	
707018PRP-N007	4	0.9	N/A	
707018PRP-N008	4	2.4	N/A	
707018PRP-N009	4	0.9	N/A	
707018PRP-N010	4	0.9	N/A	
707018PRP-N011	4	0.9	N/A	
707018PRP-N012	4	0.9	N/A	
707018PRP-N013	4	0.9	N/A	
707018PRP-N014	4	0.9	N/A	
707018PRP-N015	4	0.9	N/A	

**Survey Area:** C**Survey Unit:** 707018**Building:** 707

Description: B707 2nd floor annex - between columns N-O 1-5.4

## Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707018PBP-N016	4	0.9	N/A	
707018PBP-N017	4	0.9	N/A	
707018PBP-N018	4	0.9	N/A	
707018PBP-N019	4	0.9	N/A	
707018PBP-N020	4	0.9	N/A	

**Comments:**

Survey Area: C

Survey Unit: 707018

Building: 707

Description: B707 2nd floor annex - between columns N-O 1-5-4

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707018PRP-N001	1	55.5	N/A	
707018PRP-N002	2	45.2	N/A	
707018PRP-N003	1	15.9	N/A	
707018QRP-N004	1	17.4	N/A	
707018PRP-N004	2	5.8	N/A	
707018PRP-N005	1	45.6	N/A	
707018QRP-N005	2	20.6	N/A	
707018PRP-N006	1	6.0	N/A	
707018SRP-N007	6	22.3	N/A	
707018PRP-N008	1	42.1	N/A	
707018PRP-N009	2	28.4	N/A	
707018PRP-N010	1	15.9	N/A	
707018PRP-N011	3	10.3	N/A	
707018PRP-N012	3	16.5	N/A	
707018PRP-N013	3	19.8	N/A	
707018PRP-N014	3	29.3	N/A	
707018PRP-N015	3	0.8	N/A	

**Survey Area:** C**Survey Unit:** 707018**Building:** 707

Description: B707 2nd floor annex - between columns N-O - 1:5.4

## Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707018PBP-N016	2	22.5	N/A	
707018PBP-N017	3	26.8	N/A	
707018PBP-N018	2	35.8	N/A	
707018PBP-N019	2	12.6	N/A	
707018PBP-N020	1	42.5	N/A	

**Comments:** 100% of accessible floor surfaces were scanned. All values <300 dpm/100 cm2 after investigations were complete.



**RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: C

Survey Unit: 707018

Classification: 2

Building: 707

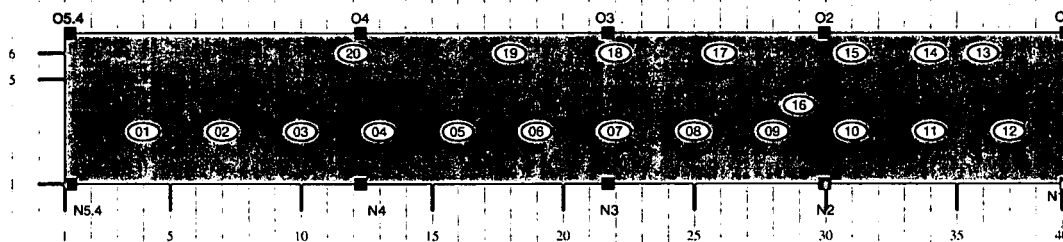
Survey Unit Description: Second floor- Annex

Total Floor Area: 222 sq. m

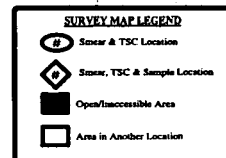
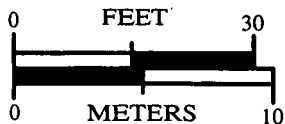
Total Area: 222 sq. m

Random Start Grid Size: 3 x 3 sq. m

**SURVEY UNIT 707018 - MAP 1 OF 1**



Scanned Area



132

## Investigation Documentation

Survey Unit: 707019

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	O4	300	59	260	Yes	245	No	N/A
2	Floor	O4	300	63	278	Yes	93	Yes	N/A
3	Floor	O4	400	75	332	Yes	65	Yes	N/A
4	Floor	O3	300	58	256	Yes	143	No	N/A

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum

244.8

N/A

ATTACHMENT B9

Survey Unit 707019 Survey Data and Maps

Survey Area: C

Survey Unit: 707019

Building: 707

Description: B707 2nd floor annex - between column lines O-P, 1-5-4

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 5

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

Nbr QC Performed: 2

#### Alpha

Maximum: 47.3 dpm/100cm<sup>2</sup>Minimum: -4.3 dpm/100cm<sup>2</sup>Mean: 22.9 dpm/100cm<sup>2</sup>

Standard Deviation: 12.8

QC Maximum: 15.9 dpm/100cm<sup>2</sup>QC Minimum: 6.8 dpm/100cm<sup>2</sup>QC Mean: 11.4 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 5

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

#### Alpha

Maximum: 3.6 dpm/100cm<sup>2</sup>Minimum: -0.9 dpm/100cm<sup>2</sup>Mean: 0.7 dpm/100cm<sup>2</sup>

Standard Deviation: 1.3

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 15

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

135

Survey Area: C

Survey Unit: 707019

Building: 707

Description: B707 2nd floor annex - between column lines O-P, 1-5.4

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	701822	08/15/04	Electra	4173	DP-6	11/04/04	0.221	NA	48.0	NA	T
2	600137	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
3	600137	08/15/04	SAC-4	1284	NA	01/29/05	0.333	NA	10.0	NA	R
4	600137	08/15/04	SAC-4	1265	NA	09/15/04	0.333	NA	10.0	NA	R
5	520363	08/15/04	Electra	4175	DP-6	10/07/04	0.221	NA	48.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

136  
12

Survey Area: C

Survey Unit: 707019

Building: 707

Description: B707 2nd floor annex - between column lines O-P, 1-5.4

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707019PRP-N001	2	0.9	N/A	
707019PRP-N002	3	0.6	N/A	
707019PRP-N003	4	-0.9	N/A	
707019PRP-N004	2	0.9	N/A	
707019PRP-N005	3	2.1	N/A	
707019PRP-N006	4	-0.9	N/A	
707019PRP-N007	2	0.9	N/A	
707019PRP-N008	3	0.6	N/A	
707019PRP-N009	4	-0.9	N/A	
707019PRP-N010	2	2.4	N/A	
707019PRP-N011	3	0.6	N/A	
707019PRP-N012	4	-0.9	N/A	
707019PRP-N013	2	-0.6	N/A	
707019PRP-N014	3	2.1	N/A	
707019PRP-N015	4	2.1	N/A	

Survey Area: C

Survey Unit: 707019

Building: 707

Description: B707 2nd floor annex - between column lines O-P, 1-5.4

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707019PBP-N016	2	0.9	N/A	
707019PBP-N017	3	-0.9	N/A	
707019PBP-N018	4	0.6	N/A	
707019PBP-N019	2	0.9	N/A	
707019PBP-N020	3	3.6	N/A	

Comments:

Survey Area: C

Survey Unit: 707019

Building: 707

Description: B707 2nd floor annex - between column lines O-P, 1-5'4"

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707019PRP-N001	1	39.6	N/A	
707019PRP-N002	1	16.9	N/A	
707019PRP-N003	1	22.8	N/A	
707019PRP-N004	1	26.0	N/A	
707019PRP-N005	1	11.1	N/A	
707019PRP-N006	1	47.3	N/A	
707019PRP-N007	1	11.1	N/A	
707019PRP-N008	1	4.3	N/A	
707019PRP-N009	1	38.2	N/A	
707019PRP-N010	1	16.9	N/A	
707019PRP-N011	1	11.1	N/A	
707019PRP-N012	1	13.8	N/A	
707019QRP-N012	5	6.8	N/A	
707019PRP-N013	1	22.8	N/A	
707019PRP-N014	1	29.2	N/A	
707019PRP-N015	1	35.0	N/A	
707019QRP-N015	5	15.9	N/A	



Survey Area: C

Survey Unit: 707019

Building: 707

Description: B707 2nd floor annex - between column lines O-P 1-5.4

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707019PBP-N016	1	36.6	N/A	
707019PBP-N017	1	21.7	N/A	
707019PBP-N018	1	9.5	N/A	
707019PBP-N019	1	33.9	N/A	
707019PBP-N020	1	18.5	N/A	

Comments: Scanned 100% of the accessible surfaces. All values <300 dpm/100 cm<sup>2</sup>.

**RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: C

Survey Unit: 707019

Classification: 2

Building: 707

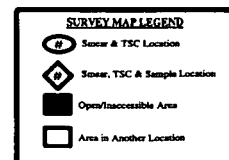
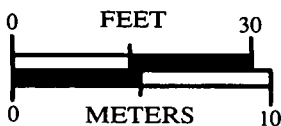
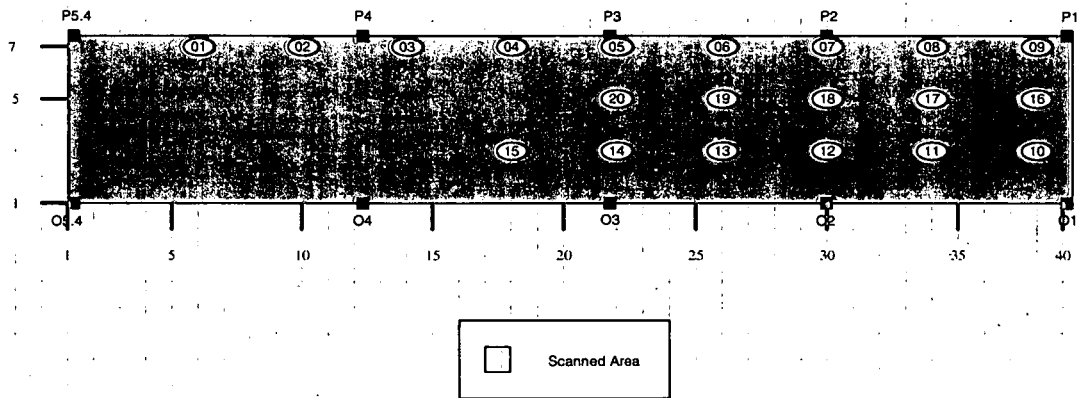
Survey Unit Description: Second floor- Annex

Total Floor Area: 247 sq. m

Total Area: 247 sq. m

Random Start Grid Size: 4 x 4 sq. m

**SURVEY UNIT 707019 - MAP 1 OF 1**



ATTACHMENT B10

Survey Unit 707020 Survey Data and Maps

## Investigation Documentation

Survey Unit: 707020

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm) <sup>Note 1</sup>	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	P3	593	93	411	Yes	143	No	N/A
2	Floor	P5	859	243	1069	Yes	156	No	N/A

Note 1 = total activity per 600 cm<sup>2</sup> probe

Maximum 155.8

N/A

143

**Survey Area:** C**Survey Unit:** 707020**Building:** 707**Description:** B707 2nd floor annex - floor area between column lines P-Q, 1<sup>st</sup> 5.4

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 44.5 dpm/100cm<sup>2</sup>Minimum: 2.4 dpm/100cm<sup>2</sup>Mean: 16.1 dpm/100cm<sup>2</sup>

Standard Deviation: 10.5

QC Maximum: 43.7 dpm/100cm<sup>2</sup>QC Minimum: 1.6 dpm/100cm<sup>2</sup>QC Mean: 22.7 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 2.1 dpm/100cm<sup>2</sup>Minimum: -0.9 dpm/100cm<sup>2</sup>Mean: 0.1 dpm/100cm<sup>2</sup>

Standard Deviation: 1.1

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 15

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: C

Survey Unit: 707020

Building: 707

Description: B707, 2nd floor, annex - floor area between column lines P-Q, 1-5/4

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	431757	08/15/04	Electra	4175	DP-6	10/02/04	0.221	NA	48.0	NA	T
2	702377	08/15/04	Electra	4175	DP-6	10/02/04	0.221	NA	48.0	NA	T
3	600137	08/15/04	SAC-4	1284	NA	01/29/05	0.333	NA	10.0	NA	R
4	600137	08/15/04	SAC-4	1265	NA	09/15/04	0.333	NA	10.0	NA	R
5	600137	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
6	701822	08/15/04	Electra	4173	DP-6	11/04/04	0.221	NA	48.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

145

Survey Area: C

Survey Unit: 707020

Building: 707

Description: B707 2nd floor annex - floor area between column lines P-Q, 1-5.4

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707020PRP-N001	3	-0.9	N/A	
707020PRP-N002	4	0.6	N/A	
707020PRP-N003	5	-0.6	N/A	
707020PRP-N004	3	-0.9	N/A	
707020PRP-N005	4	-0.9	N/A	
707020PRP-N006	5	-0.6	N/A	
707020PRP-N007	3	-0.9	N/A	
707020PRP-N008	4	0.6	N/A	
707020PRP-N009	5	-0.6	N/A	
707020PRP-N010	3	0.6	N/A	
707020PRP-N011	4	2.1	N/A	
707020PRP-N012	5	-0.6	N/A	
707020PRP-N013	3	2.1	N/A	
707020PRP-N014	4	0.6	N/A	
707020PRP-N015	5	0.9	N/A	

Comments:

Survey Area: C

Survey Unit: 707020

Building: 707

Description: B707 2nd floor annex floor area between column lines P-Q, 1-5.4

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707020PRP-N001	2	17.4	N/A	
707020PRP-N002	2	11.5	N/A	
707020PRP-N003	2	2.4	N/A	
707020PRP-N004	2	14.7	N/A	
707020PRP-N005	2	44.5	N/A	
707020QRP-N005	6	1.6	N/A	
707020PRP-N006	2	8.3	N/A	
707020PRP-N007	2	17.4	N/A	
707020PRP-N008	2	11.5	N/A	
707020PRP-N009	2	11.5	N/A	
707020PRP-N010	2	14.7	N/A	
707020PRP-N011	2	2.4	N/A	
707020PRP-N012	2	17.4	N/A	
707020PRP-N013	2	29.6	N/A	
707020QRP-N013	6	43.7	N/A	
707020PRP-N014	2	14.7	N/A	
707020PRP-N015	2	23.7	N/A	

Comments: 100% of the accessible floor surfaces were scanned. All values after remediation <300 dpm/100 cm<sup>2</sup>.



Survey Area: C

Survey Unit: 707020

Building: 707

Description: B707 2nd floor annex - floor area between column lines P-Q, 15.4

**Media Samples Data Sheet**

Site Sample ID / Nbr ----- Description	Nuclide	Sample MDA (pCi/g)	Weight (g)	Surface Area (in <sup>2</sup> )	Sample Nuclide (dpm/100cm <sup>2</sup> )	Sample Nuclide MDA (dpm/100cm <sup>2</sup> )	Sample Total (dpm/100cm <sup>2</sup> )
--	---------	--------------------------	---------------	---------------------------------------	--	--	--

Comments:

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: C

Survey Unit: 707020

Classification: 2

Building: 707

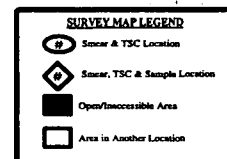
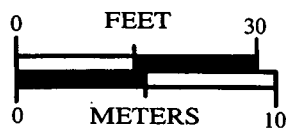
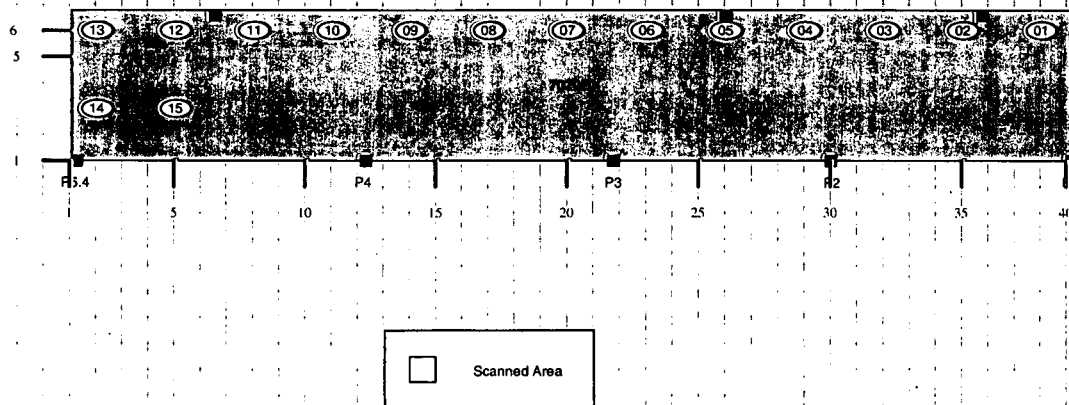
Survey Unit Description: Second floor- Annex

Total Floor Area: 222 sq. m

Total Area: 222 sq. m

Random Start Grid Size: 3 x 3 sq. m

## SURVEY UNIT 707020 - MAP 1 OF 1



ATTACHMENT B11

Survey Unit 707101 Survey Data and Maps

# Investigation Documentation

Survey Unit: 707101- 707112

Investigation #	Surface Floor, Wall, Ceiling etc.	Location	"As Found" (dpm/100 cm <sup>2</sup> )	Investigation Value (cpm)	Investigation (dpm)	Remediation Performed? (Yes/No)	"As Left" (dpm)	9-Point Done? (Yes/No)	meter <sup>2</sup> Average (dpm/100 cm <sup>2</sup> )
1	Floor	G16	951	N/A	N/A	Yes	44	Yes	18.7
2	Floor	G16	788	N/A	N/A	Yes	3	Yes	10.1
3	Floor	G15	313	N/A	N/A	Yes	6	Yes	19.7
4	Floor	F16	380	N/A	N/A	Yes	11	Yes	26.9
5	Floor	D16	508	N/A	N/A	Yes	35	Yes	19.7
6	Floor	D16	766	N/A	N/A	Yes	3	Yes	18.3
7	Floor	D16	623	N/A	N/A	Yes	16	Yes	16.8
8	Floor	E13	553	N/A	N/A	Yes	41	Yes	27.1
9	Floor	F13	380	N/A	N/A	Yes	12	Yes	19.1
10	Floor	F13	658	N/A	N/A	Yes	19	Yes	20.4
11	Floor	G13	763	N/A	N/A	Yes	34	Yes	29.1
12	Floor	E13	425	N/A	N/A	Yes	-3	Yes	20.4
13	Floor	G13	1489	N/A	N/A	Yes	25	Yes	24.2
14	Floor	E11	1500	N/A	N/A	Yes	25	Yes	33.2
15	Floor	E11	552	N/A	N/A	Yes	28	Yes	14.1
16	Floor	E11	486	N/A	N/A	Yes	9	Yes	16.2
17	Floor	F11	381	N/A	N/A	Yes	6	Yes	14.6
18	Floor	G13	477	N/A	N/A	Yes	9	Yes	11.3
19	Floor	G13	339	N/A	N/A	Yes	28	Yes	17.3

Maximum

43.9

33.2

151

Survey Area: B

Survey Unit: 707101

Building: 707

Description: 2nd floor, room 220 - east quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 10

Nbr QC Required: 3

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 10

Nbr QC Performed: 3

#### Alpha

Maximum: 46.3 dpm/100cm<sup>2</sup>  
Minimum: -4.6 dpm/100cm<sup>2</sup>  
Mean: 19.7 dpm/100cm<sup>2</sup>  
Standard Deviation: 13.4  
QC Maximum: 29.9 dpm/100cm<sup>2</sup>  
QC Minimum: 13.2 dpm/100cm<sup>2</sup>  
QC Mean: 23.7 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>W</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 10

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 10

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>  
Minimum: -0.3 dpm/100cm<sup>2</sup>  
Mean: 0.3 dpm/100cm<sup>2</sup>  
Standard Deviation: 0.8  
Transuranic DCGL<sub>W</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

#### Uranium

Maximum: NA dpm/100cm<sup>2</sup>  
Minimum: NA dpm/100cm<sup>2</sup>  
Mean: NA dpm/100cm<sup>2</sup>  
Standard Deviation: NA  
Uranium DCGL<sub>W</sub>: 5,000 dpm/100cm<sup>2</sup>  
Uranium DCGL<sub>EMC</sub>: 15,000 dpm/100cm<sup>2</sup>

#### Transuranic

Maximum: NA dpm/100cm<sup>2</sup>  
Minimum: NA dpm/100cm<sup>2</sup>  
Mean: NA dpm/100cm<sup>2</sup>  
Standard Deviation: NA  
Transuranic DCGL<sub>W</sub>: 100 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300 dpm/100cm<sup>2</sup>

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: B

Survey Unit: 707101

Building: 707

Description: 2nd floor room 220 - east quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	600137	07/31/04	Electra	4411	DP-6	11/19/04	0.210	NA	48.0	NA	T
2	601302	07/31/04	Electra	4176	DP-6	01/16/05	0.220	NA	48.0	NA	T
3	600137	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	600137	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
5	509552	10/05/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
6	509284	10/05/04	Electra	4413	DP-6	03/09/05	0.208	NA	48.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707101

Building: 707

Description: 2nd floor, room 220 - east quadrant

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707101PRP-N001	5	1.5	N/A	
707101PRP-N002	5	0.0	N/A	
707101PRP-N003	3	-0.3	N/A	
707101PRP-N004	4	0.0	N/A	
707101PRP-N005	3	1.2	N/A	
707101PRP-N006	5	0.0	N/A	
707101PRP-N007	5	0.0	N/A	
707101PRP-N008	5	0.0	N/A	
707101PRP-N009	4	0.0	N/A	
707101PRP-N010	3	-0.3	N/A	
707101PRP-N011	5	1.5	N/A	
707101PRP-N012	5	0.0	N/A	
707101PRP-N013	4	0.0	N/A	
707101PRP-N014	3	-0.3	N/A	
707101PRP-N015	5	3.0	N/A	

Survey Area: B

Survey Unit: 707101

Building: 707

Description: 2nd floor, room 220 - east quadrant.

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707101PBP-N016	4	0.0	N/A	
707101PBP-N017	3	-0.3	N/A	
707101PBP-N018	4	0.0	N/A	
707101PBP-N019	3	-0.3	N/A	
707101PBP-N020	4	0.0	N/A	
707101PBP-N021	3	-0.3	N/A	
707101PBP-N022	4	0.0	N/A	
707101PBP-N023	3	1.2	N/A	
707101PBP-N024	4	0.0	N/A	
707101PBP-N025	3	1.2	N/A	

Comments:

155



Survey Area: B

Survey Unit: 707101

Building: 707

Description: 2nd floor, room 220 - east quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707101PRP-N001	6	-4.6	N/A	
707101PRP-N002	6	11.2	N/A	
707101PRP-N003	1	7.6	N/A	
707101QRP-N003	2	13.2	N/A	
707101PRP-N004	1	14.3	N/A	
707101PRP-N005	1	20.5	N/A	
707101QRP-N005	2	28.2	N/A	
707101PRP-N006	6	33.8	N/A	
707101PRP-N007	6	30.5	N/A	
707101PRP-N008	6	43.5	N/A	
707101PRP-N009	1	26.7	N/A	
707101PRP-N010	1	1.4	N/A	
707101PRP-N011	6	46.3	N/A	
707101PRP-N012	6	7.9	N/A	
707101PRP-N013	1	1.4	N/A	
707101PRP-N014	1	26.7	N/A	
707101PRP-N015	6	20.9	N/A	
707101QRP-N020	1	29.9	N/A	

156

Survey Area: B

Survey Unit: 707101

Building: 707

Description: 2nd floor, room 220 - east quadrant

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707101PBP-N016	2	26.0	N/A	
707101PBP-N017	2	16.9	N/A	
707101PBP-N018	2	7.9	N/A	
707101PBP-N019	2	13.8	N/A	
707101PBP-N020	2	13.8	N/A	
707101PBP-N021	2	19.7	N/A	
707101PBP-N022	2	10.6	N/A	
707101PBP-N023	2	41.0	N/A	
707101PBP-N024	2	31.9	N/A	
707101PBP-N025	2	22.9	N/A	

Comments: Scanned 100% of accessible floor surfaces. All values < 300 dpm/100 cm<sup>2</sup>.

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707101

Classification: 1

Building: 707

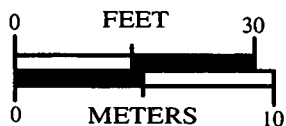
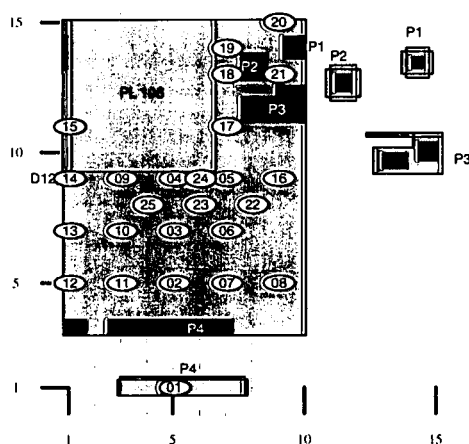
Survey Unit Description: Room 220 (northeast side)

Total Floor Area: 104 sq. m

Total Area: 113 sq. m

Grid Size: 2 m x 2 m

## SURVEY UNIT 707101 - MAP 1 OF 1



SURVEY MAP LEGEND	
	Seal & TSC Location
	Seal, TSC & Sample Location
	Open/Inaccessible Area
	Unpainted Area

ATTACHMENT B12

Survey Unit 707102 Survey Data and Maps

Survey Area: B

Survey Unit: 707102

Building: 707

Description: 2nd floor, room 220 east quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 47.4 dpm/100cm<sup>2</sup>  
Minimum: 3.7 dpm/100cm<sup>2</sup>  
Mean: 24.8 dpm/100cm<sup>2</sup>  
Standard Deviation: 13.3  
QC Maximum: 22.9 dpm/100cm<sup>2</sup>  
QC Minimum: 19.1 dpm/100cm<sup>2</sup>  
QC Mean: 21.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 6.0 dpm/100cm<sup>2</sup>  
Minimum: -0.3 dpm/100cm<sup>2</sup>  
Mean: 0.6 dpm/100cm<sup>2</sup>  
Standard Deviation: 1.8  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

#### Uranium

Maximum: NA dpm/100cm<sup>2</sup>  
Minimum: NA dpm/100cm<sup>2</sup>  
Mean: NA dpm/100cm<sup>2</sup>  
Standard Deviation: NA  
Uranium DCGL<sub>w</sub>: 5,000 dpm/100cm<sup>2</sup>  
Uranium DCGL<sub>EMC</sub>: 15,000 dpm/100cm<sup>2</sup>

#### Transuranic

Maximum: NA dpm/100cm<sup>2</sup>  
Minimum: NA dpm/100cm<sup>2</sup>  
Mean: NA dpm/100cm<sup>2</sup>  
Standard Deviation: NA  
Transuranic DCGL<sub>w</sub>: 100 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300 dpm/100cm<sup>2</sup>

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

160

Survey Area: B

Survey Unit: 707102

Building: 707

Description: 2nd floor, room 220 east quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	600638	07/31/04	Electra	1100	DP-6	09/02/04	0.214	NA	48.0	NA	Q
2	702058	07/31/04	Electra	3974	DP-6	09/04/04	0.215	NA	48.0	NA	T
3	600638	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	702058	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

161

Survey Area: B

Survey Unit: 707102

Building: 707

Description: 2nd floor, room 220 east quadrant

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707102PRP-N001	3	-0.3	N/A	
707102PRP-N002	4	0.0	N/A	
707102PRP-N003	3	2.7	N/A	
707102PRP-N004	4	0.0	N/A	
707102PRP-N005	3	-0.3	N/A	
707102PRP-N006	4	6.0	N/A	
707102PRP-N007	3	2.7	N/A	
707102PRP-N008	4	0.0	N/A	
707102PRP-N009	3	-0.3	N/A	
707102PRP-N010	4	0.0	N/A	
707102PRP-N011	3	-0.3	N/A	
707102PRP-N012	4	0.0	N/A	
707102PRP-N013	3	-0.3	N/A	
707102PRP-N014	4	0.0	N/A	
707102PRP-N015	3	-0.3	N/A	

Comments:

Survey Area: B

Survey Unit: 707102

Building: 707

Description: 2nd floor, room 220 east quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707102PRP-N001	2	22.3	N/A	
707102PRP-N002	2	13.0	N/A	
707102PRP-N003	2	31.6	N/A	
707102PRP-N004	2	22.3	N/A	
707102QRP-N005	1	22.9	N/A	
707102PRP-N005	2	22.3	N/A	
707102PRP-N006	2	47.4	N/A	
707102PRP-N007	2	38.1	N/A	
707102PRP-N008	2	25.5	N/A	
707102PRP-N009	2	3.7	N/A	
707102PRP-N010	2	19.5	N/A	
707102PRP-N011	2	28.8	N/A	
707102PRP-N012	2	13.0	N/A	
707102QRP-N013	1	19.1	N/A	
707102PRP-N013	2	40.9	N/A	
707102PRP-N014	2	3.7	N/A	
707102PRP-N015	2	40.9	N/A	

Comments:

163



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707102

Classification: 1

Building: 707

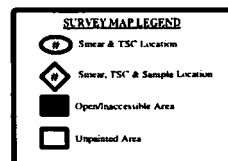
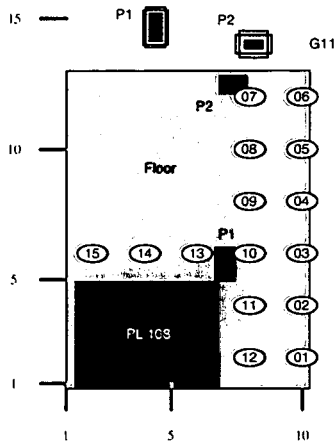
Survey Unit Description: Room 220 (northeast side)

Total Floor Area: 89 sq. m

Total Area: 89 sq. m

Grid Size: 2 m x 2 m

## **SURVEY UNIT 707102 - MAP 1 OF 1**



164

ATTACHMENT B13

Survey Unit 707103 Survey Data and Maps

Survey Area: B

Survey Unit: 707103

Building: 707

Description: 2nd floor, room 220, east quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 38.7 dpm/100cm<sup>2</sup>

Minimum: -0.3 dpm/100cm<sup>2</sup>

Mean: 20.1 dpm/100cm<sup>2</sup>

Standard Deviation: 12.4

QC Maximum: 45.8 dpm/100cm<sup>2</sup>

QC Minimum: 36.4 dpm/100cm<sup>2</sup>

QC Mean: 41.1 dpm/100cm<sup>2</sup>

Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>

Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 1.5 dpm/100cm<sup>2</sup>

Minimum: -0.3 dpm/100cm<sup>2</sup>

Mean: 0.2 dpm/100cm<sup>2</sup>

Standard Deviation: 0.7

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 1

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: B

Survey Unit: 707103

Building: 707

Description: 2nd floor room 220 east quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	510166	07/31/04	Electra	4680	DP-6	08/20/04	0.228	NA	48.0	NA	T
2	520363	07/31/04	Electra	1240	DP-6	01/22/05	0.212	NA	48.0	NA	T
3	520363	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	520363	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
5	509552	10/05/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
6	509284	10/05/04	Electra	4413	DP-6	03/09/05	0.208	NA	48.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

167

Survey Area: B

Survey Unit: 707103

Building: 707

Description: 2nd floor, room 220, east quadrant

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707103PRP-N001	3	-0.3	N/A	
707103PRP-N002	4	0.0	N/A	
707103PRP-N003	3	-0.3	N/A	
707103PRP-N004	4	0.0	N/A	
707103PRP-N005	3	-0.3	N/A	
707103PRP-N006	4	0.0	N/A	
707103PRP-N007	3	-0.3	N/A	
707103PRP-N008	4	1.5	N/A	
707103PRP-N009	5	0.0	N/A	
707103PRP-N010	5	0.0	N/A	
707103PRP-N011	5	0.0	N/A	
707103PRP-N012	5	1.5	N/A	
707103PRP-N013	4	0.0	N/A	
707103PRP-N014	3	-0.3	N/A	
707103PRP-N015	4	1.5	N/A	

Comments:

168

Survey Area: B

Survey Unit: 707103

Building: 707

Description: 2nd floor, room 220, east quadrant

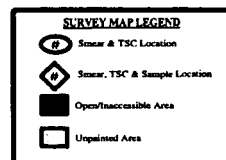
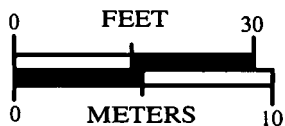
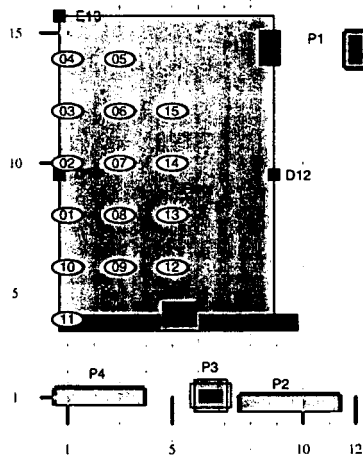
**Random/QC Total Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707103PRP-N001	1	38.7	N/A	
707103PRP-N002	1	21.1	N/A	
707103PRP-N003	1	26.8	N/A	
707103QRP-N003	2	36.4	N/A	
707103PRP-N004	1	32.5	N/A	
707103PRP-N005	1	3.6	N/A	
707103PRP-N006	1	12.4	N/A	
707103PRP-N007	1	12.4	N/A	
707103QRP-N007	2	45.8	N/A	
707103PRP-N008	1	3.6	N/A	
707103PRP-N009	6	-0.3	N/A	
707103PRP-N010	6	35.3	N/A	
707103PRP-N011	6	31.9	N/A	
707103PRP-N012	6	25.6	N/A	
707103PRP-N013	1	12.4	N/A	
707103PRP-N014	1	26.8	N/A	
707103PRP-N015	1	18.1	N/A	

**Comments:** Scanned 100% of accessible floor surfaces. All values <300 dpm/100 cm<sup>2</sup>.

**Survey Area: B      Survey Unit: 707103      Classification: 1**  
**Building: 707**  
**Survey Unit Description: Room 220 (northeast side)**

SURVEY UNIT 707103 - MAP 1 OF 1



ATTACHMENT B14

Survey Unit 707104 Survey Data and Maps



Survey Area: B

Survey Unit: 707104

Building: B707

Description: B707 2nd floor southeast quadrant of room 220

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 5

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

Nbr QC Performed: 2

#### Alpha

Maximum: 43.7 dpm/100cm<sup>2</sup>

Minimum: 8.1 dpm/100cm<sup>2</sup>

Mean: 23.4 dpm/100cm<sup>2</sup>

Standard Deviation: 9.4

QC Maximum: 30.9 dpm/100cm<sup>2</sup>

QC Minimum: 17.6 dpm/100cm<sup>2</sup>

QC Mean: 24.2 dpm/100cm<sup>2</sup>

Transuranic DCGL<sub>W</sub>: 100.0 dpm/100cm<sup>2</sup>

Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 5

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

#### Alpha

Maximum: 2.7 dpm/100cm<sup>2</sup>

Minimum: -0.3 dpm/100cm<sup>2</sup>

Mean: 0.3 dpm/100cm<sup>2</sup>

Standard Deviation: 0.9

Transuranic DCGL<sub>W</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: B

Survey Unit: 707104

Building: B707

Description: B707 2nd floor southeast quadrant of room 220

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	600757	07/31/04	Electra	2306	DP-6	11/17/04	0.218	NA	48.0	NA	T
2	600757	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
3	600757	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
4	600757	07/31/04	Electra	1436	NA	01/02/05	0.227	NA	48.0	NA	Q
5	509284	08/02/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
6	509284	08/02/04	Electra	1240	DP-6	01/22/05	0.212	NA	48.0	NA	T
7	600805	07/31/04	Electra	2306	DP-6	11/17/04	0.218	NA	48.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707104

Building: B707

Description: B707 2nd floor southeast quadrant of room 220

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707104PRP-N001	3	0.0	N/A	
707104PRP-N002	2	-0.3	N/A	
707104PRP-N003	3	0.0	N/A	
707104PRP-N004	2	-0.3	N/A	
707104PRP-N005	3	0.0	N/A	
707104PRP-N006	2	-0.3	N/A	
707104PRP-N007	3	1.5	N/A	
707104PRP-N008	5	-0.3	N/A	
707104PRP-N009	2	-0.3	N/A	
707104PRP-N010	5	2.7	N/A	
707104PRP-N011	5	1.2	N/A	
707104PRP-N012	3	0.0	N/A	
707104PRP-N013	2	-0.3	N/A	
707104PRP-N014	3	0.0	N/A	
707104PRP-N015	2	-0.3	N/A	

Survey Area: B

Survey Unit: 707104

Building: B707

Description: B707 2nd floor, southeast quadrant of room 220

## Biased Removable Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707104PBP-N017	2	-0.3	N/A	
707104PBP-N018	3	0.0	N/A	
707104PBP-N019	2	1.2	N/A	
707104PBP-N020	3	1.5	N/A	
707104PBP-N021	3	0.0	N/A	

Comments:

175

Survey Area: B7

Survey Unit: 707104

Building: B707

Description: B707 2nd floor southeast quadrant of room 220

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707104PRP-N001	1	29.5	N/A	
707104QRP-N001	4	30.9	N/A	
707104PRP-N002	1	20.3	N/A	
707104PRP-N003	1	32.7	N/A	
707104PRP-N004	1	17.5	N/A	
707104PRP-N005	1	43.7	N/A	
707104PRP-N006	1	32.7	N/A	
707104PRP-N007	1	23.5	N/A	
707104PRP-N008	6	34.0	N/A	
707104PRP-N009	1	29.5	N/A	
707104QRP-N009	4	17.6	N/A	
707104PRP-N010	6	24.5	N/A	
707104PRP-N011	6	21.2	N/A	
707104PRP-N012	7	35.9	N/A	
707104PRP-N013	7	20.3	N/A	
707104PRP-N014	7	14.3	N/A	
707104PRP-N015	1	11.1	N/A	

**Survey Area:** B**Survey Unit:** 707104**Building:** B707**Description:** B707 2nd floor southeast quadrant of room 220

## Biased Total Surface Activity Data Sheet

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707104PBP-N016	7	24.7	N/A	
707104PBP-N017	7	17.3	N/A	
707104PBP-N018	7	8.1	N/A	
707104PBP-N019	7	14.1	N/A	
707104PBP-N020	7	14.1	N/A	

**Comments:** 100% of the accessible floor surfaces scanned. Results <300 dpm/100 cm<sup>2</sup>.

**RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707104

Classification: 1

Building: 707

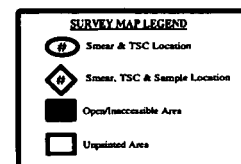
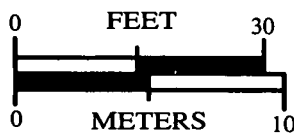
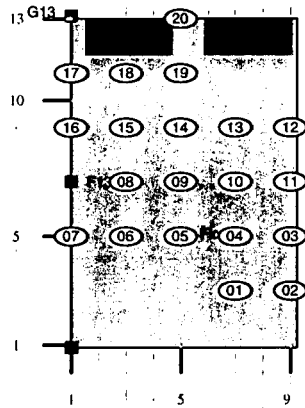
Survey Unit Description: Room 220 (northeast side)

Total Floor Area: 92 sq. m

Total Area: 92 sq. m

Grid Size: 2 m x 2 m

**SURVEY UNIT 707104 - MAP 1 OF 1**



178

ATTACHMENT B15

Survey Unit 707105 Survey Data and Maps



**Survey Area:** B**Survey Unit:** 707105**Building:** B707**Description:** B707 2nd floor - Floor in southeast quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 15

Nbr QC Required: 3

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 15

Nbr QC Performed: 3

#### Alpha

Maximum: 54.7 dpm/100cm<sup>2</sup>Minimum: -6.7 dpm/100cm<sup>2</sup>Mean: 20.7 dpm/100cm<sup>2</sup>

Standard Deviation: 16.6

QC Maximum: 27.2 dpm/100cm<sup>2</sup>QC Minimum: 2.2 dpm/100cm<sup>2</sup>QC Mean: 14.6 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 15

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 15

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: -0.3 dpm/100cm<sup>2</sup>Mean: 0.8 dpm/100cm<sup>2</sup>

Standard Deviation: 1.2

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

180

Survey Area: B	Survey Unit: 707105	Building: B707
Description: B707 2nd floor - Floor in southeast quadrant		

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	704000	07/31/04	Electra	1384	DP-6	01/15/05	0.212	NA	48.0	NA	T
2	701418	07/31/04	Electra	1549	DP-6	08/24/04	0.227	NA	48.0	NA	T
3	704000	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	704000	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
5	704000	10/05/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
6	509284	10/05/04	Electra	4413	DP-6	03/09/05	0.208	NA	48.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707105

Building: B707

Description: B707, 2nd floor, Floor in southeast quadrant

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707105PRP-N001	3	1.2	N/A	
707105PRP-N002	4	0.0	N/A	
707105PRP-N003	5	1.5	N/A	
707105PRP-N004	4	0.0	N/A	
707105PRP-N005	3	-0.3	N/A	
707105PRP-N006	4	3.0	N/A	
707105PRP-N007	3	-0.3	N/A	
707105PRP-N008	4	0.0	N/A	
707105PRP-N009	3	-0.3	N/A	
707105PRP-N010	4	0.0	N/A	
707105PRP-N011	5	3.0	N/A	
707105PRP-N012	5	0.0	N/A	
707105PRP-N013	3	-0.3	N/A	
707105PRP-N014	4	0.0	N/A	
707105PRP-N015	3	2.7	N/A	

182

Survey Area: B

Survey Unit: 707105

Building: B707

Description: B707 2nd floor - Floor in southeast quadrant

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707105PBP-N016	4	0.0	N/A	
707105PBP-N017	3	-0.3	N/A	
707105PBP-N018	4	0.0	N/A	
707105PBP-N019	3	-0.3	N/A	
707105PBP-N020	4	1.5	N/A	
707105PBP-N021	3	1.2	N/A	
707105PBP-N022	4	3.0	N/A	
707105PBP-N023	3	2.7	N/A	
707105PBP-N024	4	0.0	N/A	
707105PBP-N025	3	1.2	N/A	
707105PBP-N026	4	0.0	N/A	
707105PBP-N027	3	-0.3	N/A	
707105PBP-N028	5	3.0	N/A	
707105PBP-N029	5	1.5	N/A	
707105PBP-N030	5	1.5	N/A	

Comments:

Survey Area: B

Survey Unit: 707105

Building: B707

Description: B707 2nd floor - Floor in southeast quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707105PRP-N001	1	9.4	N/A	
707105PRP-N002	1	6.1	N/A	
707105PRP-N003	6	16.2	N/A	
707105PRP-N004	2	28.2	N/A	
707105PRP-N005	2	42.8	N/A	
707105PRP-N006	2	34.0	N/A	
707105PRP-N007	2	28.2	N/A	
707105PRP-N008	2	39.7	N/A	
707105PRP-N009	1	16.5	N/A	
707105PRP-N010	1	12.7	N/A	
707105PRP-N011	6	42.2	N/A	
707105PRP-N012	6	9.9	N/A	
707105PRP-N013	1	6.1	N/A	
707105PRP-N014	2	42.8	N/A	
707105PRP-N015	2	54.7	N/A	
707105QRP-N019	1	14.4	N/A	
707105QRP-N024	1	27.2	N/A	
707105QRP-N025	1	2.2	N/A	

Survey Area: B

Survey Unit: 707105

Building: B707

Description: B707 2nd floor - Floor in southeast quadrant

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707105PBP-N016	2	12.4	N/A	
707105PBP-N017	2	33.1	N/A	
707105PBP-N018	2	-2.2	N/A	
707105PBP-N019	2	33.1	N/A	
707105PBP-N020	2	38.8	N/A	
707105PBP-N021	1	-6.7	N/A	
707105PBP-N022	2	3.5	N/A	
707105PBP-N023	2	15.4	N/A	
707105PBP-N024	2	27.3	N/A	
707105PBP-N025	2	41.9	N/A	
707105PBP-N026	1	-6.7	N/A	
707105PBP-N027	1	9.3	N/A	
707105PBP-N028	6	16.4	N/A	
707105PBP-N029	6	6.8	N/A	
707105PBP-N030	6	10.1	N/A	

Comments: 100% of accessible floor surfaces scanned. All values &lt;300 dpm/100 cm2.

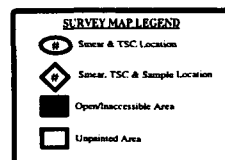
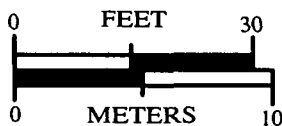
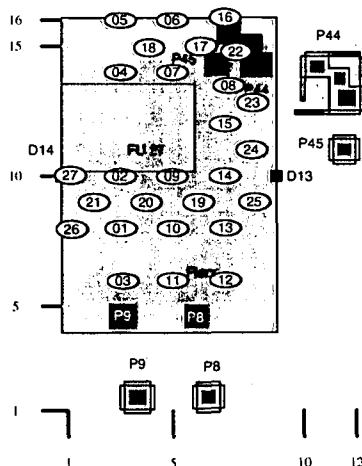
185

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B      Survey Unit: 707105      Classification: 1  
Building: 707  
Survey Unit Description: Room 220 (east side)

Total Floor Area: 95 sq. m      Total Area: 101 sq. m      Grid Size: 2 m x 2 m

## SURVEY UNIT 707105 - MAP 1 OF 1



ATTACHMENT B16

Survey Unit 707106 Survey Data and Maps



Survey Area: B

Survey Unit: 707106

Building: B707

Description: B707 2nd floor - Floor in southeast quadrant of room 220

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 46.9 dpm/100cm<sup>2</sup>  
Minimum: -1.4 dpm/100cm<sup>2</sup>  
Mean: 22.3 dpm/100cm<sup>2</sup>  
Standard Deviation: 14.4  
QC Maximum: 84.6 dpm/100cm<sup>2</sup>  
QC Minimum: 26.3 dpm/100cm<sup>2</sup>  
QC Mean: 55.4 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>W</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 4.5 dpm/100cm<sup>2</sup>  
Minimum: -0.3 dpm/100cm<sup>2</sup>  
Mean: 0.6 dpm/100cm<sup>2</sup>  
Standard Deviation: 1.3  
Transuranic DCGL<sub>W</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: B

Survey Unit: 707.106

Building: B707

Description: B707, 2nd floor - Floor in southeast quadrant of room 220

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	704000	07/31/04	Electra	1384	DP-6	01/25/05	0.212	NA	48.0	NA	T/S
2	701418	07/31/04	Electra	1549	DP-6	08/24/04	0.227	NA	48.0	NA	T/S
3	704000	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	704000	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707106

Building: B707

Description: B707, 2nd floor, Floor in southeast quadrant of room 220

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707106PRP-N001	3	-0.3	N/A	
707106PRP-N002	4	4.5	N/A	
707106PRP-N003	3	-0.3	N/A	
707106PRP-N004	4	1.5	N/A	
707106PRP-N005	3	1.2	N/A	
707106PRP-N006	4	0.0	N/A	
707106PRP-N007	3	-0.3	N/A	
707106PRP-N008	4	1.5	N/A	
707106PRP-N009	3	1.2	N/A	
707106PRP-N010	4	0.0	N/A	
707106PRP-N011	3	1.2	N/A	
707106PRP-N012	4	0.0	N/A	
707106PRP-N013	3	-0.3	N/A	
707106PRP-N014	4	0.0	N/A	
707106PRP-N015	3	-0.3	N/A	

Comments:

Survey Area: B

Survey Unit: 707106

Building: B707

Description: B707 2nd floor - Floor in southeast quadrant of room 220

**Random/QC Total Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707106PRP-N001	2	29.3	N/A	
707106PRP-N002	2	26.2	N/A	
707106PRP-N003	1	23.6	N/A	
707106PRP-N004	2	17.4	N/A	
707106PRP-N005	1	1.4	N/A	
707106QRP-N006	1	26.3	N/A	
707106PRP-N006	2	46.9	N/A	
707106PRP-N007	1	26.9	N/A	
707106QRP-N007	2	84.6	N/A	
707106PRP-N008	2	23.5	N/A	
707106PRP-N009	1	25.0	N/A	
707106PRP-N010	2	43.8	N/A	
707106PRP-N011	1	36.3	N/A	
707106PRP-N012	1	8.0	N/A	
707106PRP-N013	1	-1.4	N/A	
707106PRP-N014	1	4.7	N/A	
707106PRP-N015	2	23.5	N/A	

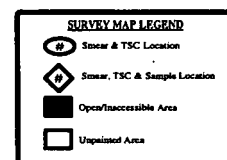
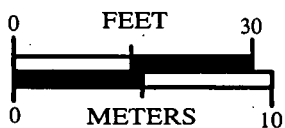
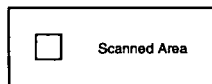
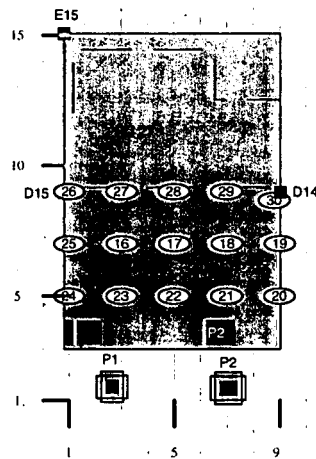
**Comments:** 100% of accessible floor surfaces scanned. All values <300 dpm/100 cm<sup>2</sup>.

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B      Survey Unit: 707107      Classification: 1  
Building: 707  
Survey Unit Description: Room 220 (east side)

Total Floor Area: 98 sq. m      Total Area: 100 sq. m      Grid Size: 2 m x 2 m

## SURVEY UNIT 707107 - MAP 1 OF 1



ATTACHMENT B17

Survey Unit 707107 Survey Data and Maps

Survey Area: B

Survey Unit: 707107

Building: B707

Description: B707 2nd floor, room 220 southeast quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 15

Nbr QC Required: 3

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 15

Nbr QC Performed: 3

#### Alpha

Maximum: 32.3 dpm/100cm<sup>2</sup>Minimum: -20.6 dpm/100cm<sup>2</sup>Mean: 1.8 dpm/100cm<sup>2</sup>

Standard Deviation: 15.4

QC Maximum: 11.4 dpm/100cm<sup>2</sup>QC Minimum: -0.9 dpm/100cm<sup>2</sup>QC Mean: 4.2 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 15

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 15

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: 0.0 dpm/100cm<sup>2</sup>Mean: 0.9 dpm/100cm<sup>2</sup>

Standard Deviation: 1.2

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: B

Survey Unit: 707107

Building: B707

Description: B707 2nd floor, room 220 southeast quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	514510	10/05/04	Electra	1826	DP-6	03/20/05	0.227	NA	48.0	NA	T
2	513185	10/05/04	Electra	2172	DP-6	12/30/04	0.219	NA	48.0	NA	T
3	513185	10/05/04	SAC-4	1471	NA	02/28/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation



Survey Area: B

Survey Unit: 707107

Building: B707

Description: B707 2nd floor, room 220 southeast quadrant

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707107PRP-N001	3	0.0	N/A	
707107PRP-N002	3	1.5	N/A	
707107PRP-N003	3	0.0	N/A	
707107PRP-N004	3	0.0	N/A	
707107PRP-N005	3	3.0	N/A	
707107PRP-N006	3	0.0	N/A	
707107PRP-N007	3	1.5	N/A	
707107PRP-N008	3	0.0	N/A	
707107PRP-N009	3	0.0	N/A	
707107PRP-N010	3	0.0	N/A	
707107PRP-N011	3	0.0	N/A	
707107PRP-N012	3	0.0	N/A	
707107PRP-N013	3	3.0	N/A	
707107PRP-N014	3	1.5	N/A	
707107PRP-N015	3	1.5	N/A	

Survey Area: B

Survey Unit: 707107

Building: B707

Description: B707 2nd floor, room 220 southeast quadrant

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707107PBP-N016	3	1.5	N/A	
707107PBP-N017	3	0.0	N/A	
707107PBP-N018	3	0.0	N/A	
707107PBP-N019	3	3.0	N/A	
707107PBP-N020	3	1.5	N/A	
707107PBP-N021	3	0.0	N/A	
707107PBP-N022	3	0.0	N/A	
707107PBP-N023	3	0.0	N/A	
707107PBP-N024	3	3.0	N/A	
707107PBP-N025	3	3.0	N/A	
707107PBP-N026	3	0.0	N/A	
707107PBP-N027	3	0.0	N/A	
707107PBP-N028	3	0.0	N/A	
707107PBP-N029	3	1.5	N/A	
707107PBP-N030	3	1.5	N/A	

Comments:

197

Survey Area: B

Survey Unit: 707107

Building: B707

Description: B707 2nd floor, room 220 southeast quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707107PRP-N001	1	5.8	N/A	
707107PRP-N002	1	11.6	N/A	
707107PRP-N003	1	0.1	N/A	
707107PRP-N004	1	17.7	N/A	
707107PRP-N005	1	8.9	N/A	
707107PRP-N006	1	11.6	N/A	
707107PRP-N007	1	26.5	N/A	
707107PRP-N008	1	14.6	N/A	
707107PRP-N009	1	32.3	N/A	
707107QRP-N009	2	11.4	N/A	
707107PRP-N010	1	29.2	N/A	
707107PRP-N011	1	26.5	N/A	
707107QRP-N011	2	2.3	N/A	
707107PRP-N012	1	17.7	N/A	
707107QRP-N012	2	-0.9	N/A	
707107PRP-N013	1	11.6	N/A	
707107PRP-N014	1	2.7	N/A	
707107PRP-N015	1	5.8	N/A	

Survey Area: B

Survey Unit: 707107

Building: B707

Description: B707 2nd floor, room 220 southeast quadrant

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707107PBP-N016	1	-14.9	N/A	
707107PBP-N017	1	-17.5	N/A	
707107PBP-N018	1	-6.1	N/A	
707107PBP-N019	1	-6.1	N/A	
707107PBP-N020	1	-20.6	N/A	
707107PBP-N021	1	-3.0	N/A	
707107PBP-N022	1	-6.1	N/A	
707107PBP-N023	1	-8.7	N/A	
707107PBP-N024	1	-14.9	N/A	
707107PBP-N025	1	-8.7	N/A	
707107PBP-N026	1	-11.8	N/A	
707107PBP-N027	1	-6.1	N/A	
707107PBP-N028	1	-17.5	N/A	
707107PBP-N029	1	-14.9	N/A	

**Comments:** 100% of accessible floor surfaces scanned. All values <300 dpm/100 cm<sup>2</sup>.

**RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707106

Classification: 1

Building: 707

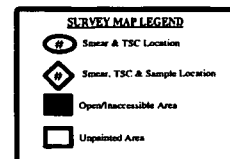
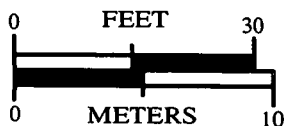
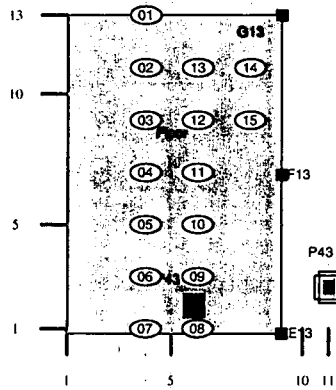
Survey Unit Description: Room 220 (east side)

Total Floor Area: 100 sq. m

Total Area: 100 sq. m

Grid Size: 2 m x 2 m

**SURVEY UNIT 707106 - MAP 1 OF 1**



200

ATTACHMENT B18

Survey Unit 707108 Survey Data and Maps

**Survey Area:** B**Survey Unit:** 707108**Building:** B707**Description:** B707 2nd floor, Room 220 southeast quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 32.7 dpm/100cm<sup>2</sup>Minimum: -1.5 dpm/100cm<sup>2</sup>Mean: 17.6 dpm/100cm<sup>2</sup>

Standard Deviation: 9.0

QC Maximum: 27.9 dpm/100cm<sup>2</sup>QC Minimum: 18.6 dpm/100cm<sup>2</sup>QC Mean: 23.3 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: -0.3 dpm/100cm<sup>2</sup>Mean: 0.0 dpm/100cm<sup>2</sup>

Standard Deviation: 0.8

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: B

Survey Unit: 707.108

Building: B707

Description: B707, 2nd floor, Room 220 southeast quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	600638	07/31/04	Electra	1100	DP-6	09/02/04	0.214	NA	48.0	NA	T
2	702058	07/31/04	Electra	3974	DP-6	09/04/04	0.215	NA	48.0	NA	T
3	600638	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	702058	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation



Survey Area: B

Survey Unit: 707108

Building: B707

Description: B707 2nd floor, Room 220 southeast quadrant

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707108PRP-N001	3	-0.3	N/A	
707108PRP-N002	4	0.0	N/A	
707108PRP-N003	3	-0.3	N/A	
707108PRP-N004	4	0.0	N/A	
707108PRP-N005	3	-0.3	N/A	
707108PRP-N006	4	0.0	N/A	
707108PRP-N007	3	-0.3	N/A	
707108PRP-N008	4	0.0	N/A	
707108PRP-N009	3	-0.3	N/A	
707108PRP-N010	4	0.0	N/A	
707108PRP-N011	3	-0.3	N/A	
707108PRP-N012	4	3.0	N/A	
707108PRP-N013	3	-0.3	N/A	
707108PRP-N014	4	0.0	N/A	
707108PRP-N015	3	-0.3	N/A	

Comments:

Survey Area: B

Survey Unit: 707108

Building: B707

Description: B707 2nd floor, Room 220 southeast quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707108PRP-N001	1	17.2	N/A	
707108PRP-N002	1	-1.5	N/A	
707108QRP-N002	2	18.6	N/A	
707108PRP-N003	1	17.2	N/A	
707108PRP-N004	1	29.9	N/A	
707108PRP-N005	1	11.2	N/A	
707108PRP-N006	1	14.0	N/A	
707108PRP-N007	1	23.3	N/A	
707108QRP-N007	2	27.9	N/A	
707108PRP-N008	1	32.7	N/A	
707108PRP-N009	1	11.2	N/A	
707108PRP-N010	1	7.9	N/A	
707108PRP-N011	1	14.0	N/A	
707108PRP-N012	1	14.0	N/A	
707108PRP-N013	1	23.3	N/A	
707108PRP-N014	1	23.3	N/A	
707108PRP-N015	1	26.6	N/A	

Comments: 100% of accessible floor surfaces scanned. All values <300 dpm/100 cm<sup>2</sup>.

205

**RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

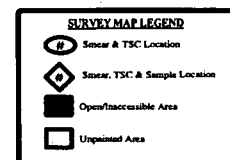
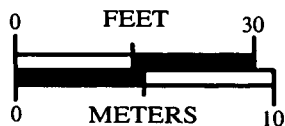
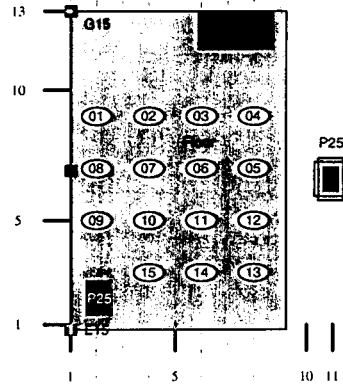
Survey Area: B      Survey Unit: 707108      Classification: 1

Building: 707

Survey Unit Description: Room 220 (east side)

Total Floor Area: 95 sq. m      Total Area: 95 sq. m      Grid Size: 2 m x 2 m

**SURVEY UNIT 707108 - MAP 1 OF 1**



ATTACHMENT B19

Survey Unit 707109 Survey Data and Maps

Survey Area: B

Survey Unit: 707109

Building: B707

Description: B707 2nd floor, room 220 east quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 20

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 20

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 40.5 dpm/100cm<sup>2</sup>Minimum: -4.1 dpm/100cm<sup>2</sup>Mean: 14.6 dpm/100cm<sup>2</sup>

Standard Deviation: 12.8

QC Maximum: 9.6 dpm/100cm<sup>2</sup>QC Minimum: 9.6 dpm/100cm<sup>2</sup>QC Mean: 9.6 dpm/100cm<sup>2</sup>Transuranic DCGLW: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 20

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 20

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: -0.3 dpm/100cm<sup>2</sup>Mean: 0.5 dpm/100cm<sup>2</sup>

Standard Deviation: 1.0

Transuranic DCGLW: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: B

Survey Unit: 707.109

Building: B707

Description: B707 2nd floor, room 220 east quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	600137	07/31/04	Electra	1427	DP-6	09/25/04	0.209	NA	48.0	NA	T
2	601302	07/31/04	Electra	1259	DP-6	10/22/04	0.224	NA	48.0	NA	T
3	600137	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	601302	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
5	514510	10/05/04	Electra	1826	DP-6	03/20/05	0.227	NA	48.0	NA	T
6	513185	10/05/04	SAC-4	1471	NA	02/28/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707109

Building: B707

Description: B707 2nd floor, room 220 east quadrant

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707109PRP-N001	3	-0.3	N/A	
707109PRP-N002	4	0.0	N/A	
707109PRP-N003	3	-0.3	N/A	
707109PRP-N004	4	0.0	N/A	
707109PRP-N005	3	-0.3	N/A	
707109PRP-N006	4	0.0	N/A	
707109PRP-N007	3	-0.3	N/A	
707109PRP-N008	4	3.0	N/A	
707109PRP-N009	3	1.2	N/A	
707109PRP-N010	4	1.5	N/A	
707109PRP-N011	6	-0.3	N/A	
707109PRP-N012	6	2.7	N/A	
707109PRP-N013	6	-0.3	N/A	
707109PRP-N014	6	1.2	N/A	
707109PRP-N015	6	1.2	N/A	
707109PRP-N016	6	-0.3	N/A	
707109PRP-N017	6	-0.3	N/A	
707109PRP-N018	6	1.2	N/A	
707109PRP-N019	3	1.2	N/A	
707109PRP-N020	4	0.0	N/A	

Comments:

Survey Area: B

Survey Unit: 707109

Building: B707

Description: B707 2nd floor room 220 east quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707109PRP-N001	1	16.6	N/A	
707109PRP-N002	1	21.4	N/A	
707109PRP-N003	1	40.5	N/A	
707109PRP-N004	1	35.7	N/A	
707109PRP-N005	1	26.1	N/A	
707109PRP-N006	2	31.9	N/A	
707109QRP-N007	1	9.6	N/A	
707109PRP-N007	2	5.1	N/A	
707109PRP-N008	2	14.0	N/A	
707109PRP-N009	2	-3.8	N/A	
707109PRP-N010	1	16.6	N/A	
707109QRP-N010	1	9.6	N/A	
707109PRP-N011	5	1.6	N/A	
707109PRP-N012	5	13.5	N/A	
707109PRP-N013	5	4.7	N/A	
707109PRP-N014	5	22.4	N/A	
707109PRP-N015	5	10.5	N/A	
707109PRP-N016	5	-4.1	N/A	
707109PRP-N017	5	7.8	N/A	
707109PRP-N018	5	-1.0	N/A	
707109PRP-N019	2	9.6	N/A	
707109PRP-N020	2	22.9	N/A	

Comments: 100% of accessible floor surfaces scanned. All values <300 dpm/100 cm<sup>2</sup>.



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707109

Classification: 1

Building: 707

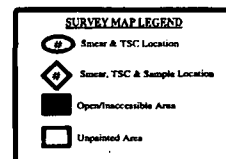
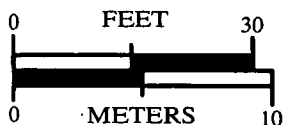
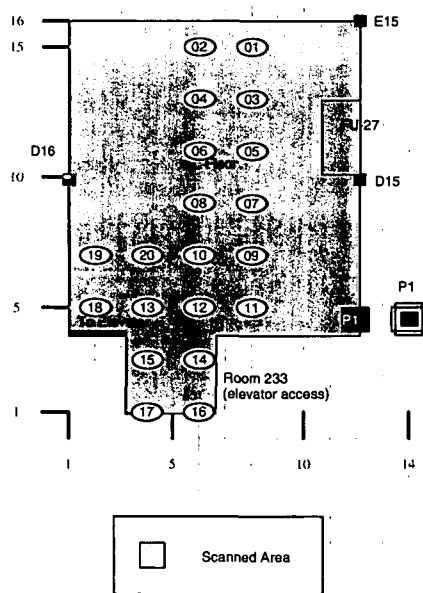
Survey Unit Description: Room 220 (northeast side)

Total Floor Area: 144 sq. m

Total Area: 145 sq. m

Grid Size: 2 m x 2 m

## **SURVEY UNIT 707109 - MAP 1 OF 1**



ATTACHMENT B20

Survey Unit 707110 Survey Data and Maps

Survey Area: B

Survey Unit: 707-110

Building: B707

Description: B707 2nd floor, room 220 east quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

Nbr QC Performed: 2

#### Alpha

Maximum: 79.2 dpm/100cm<sup>2</sup>Minimum: -6.0 dpm/100cm<sup>2</sup>Mean: 22.4 dpm/100cm<sup>2</sup>

Standard Deviation: 19.8

QC Maximum: 21.0 dpm/100cm<sup>2</sup>QC Minimum: 11.5 dpm/100cm<sup>2</sup>QC Mean: 16.3 dpm/100cm<sup>2</sup>Transuranic DCGLw: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 5

#### Alpha

Maximum: 1.5 dpm/100cm<sup>2</sup>Minimum: -0.3 dpm/100cm<sup>2</sup>Mean: 0.4 dpm/100cm<sup>2</sup>

Standard Deviation: 0.7

Transuranic DCGLw: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

214

<b>Survey Area:</b> B	<b>Survey Unit:</b> 707110	<b>Building:</b> B707
<b>Description:</b> B707 2nd floor, room 220 east quadrant		

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	510166	07/31/04	Electra	4680	DP-6	08/20/04	0.228	NA	48.0	NA	T/S
2	520363	07/31/04	Electra	1240	DP-6	01/22/05	0.212	NA	48.0	NA	T/S
3	520363	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	520363	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

215

Survey Area: B

Survey Unit: 707110

Building: B707

Description: B707, 2nd floor, room 220 east quadrant

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707110PRP-N001	3	1.2	N/A	
707110PRP-N002	3	-0.3	N/A	
707110PRP-N003	4	1.5	N/A	
707110PRP-N004	4	0.0	N/A	
707110PRP-N005	3	-0.3	N/A	
707110PRP-N006	4	0.0	N/A	
707110PRP-N007	3	-0.3	N/A	
707110PRP-N008	4	0.0	N/A	
707110PRP-N009	3	1.2	N/A	
707110PRP-N010	4	0.0	N/A	
707110PRP-N011	3	-0.3	N/A	
707110PRP-N012	4	0.0	N/A	
707110PRP-N013	3	1.2	N/A	
707110PRP-N014	4	1.5	N/A	
707110PRP-N015	3	-0.3	N/A	

216

Survey Area: B

Survey Unit: 707-110

Building: B707

Description: B707 2nd floor room 220 east quadrant

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707110PBP-N016	4	1.5	N/A	
707110PBP-N017	3	-0.3	N/A	
707110PBP-N018	4	0.0	N/A	
707110PBP-N019	3	1.2	N/A	
707110PBP-N020	4	0.0	N/A	

Comments:

Survey Area: B

Survey Unit: 707110

Building: B707

Description: B707 2nd floor room 220 east quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707110PRP-N001	1	-6.0	N/A	
707110PRP-N002	1	17.3	N/A	
707110PRP-N003	1	43.6	N/A	
707110PRP-N004	1	11.6	N/A	
707110PRP-N005	1	26.1	N/A	
707110QRP-N005	2	11.5	N/A	
707110PRP-N006	1	14.7	N/A	
707110QRP-N006	2	21.0	N/A	
707110PRP-N007	1	26.1	N/A	
707110PRP-N008	1	25.6	N/A	
707110PRP-N009	1	-6.0	N/A	
707110PRP-N010	1	-2.9	N/A	
707110PRP-N011	1	20.4	N/A	
707110PRP-N012	1	23.4	N/A	
707110PRP-N013	1	14.7	N/A	
707110PRP-N014	1	34.8	N/A	
707110PRP-N015	1	46.7	N/A	

Survey Area: B

Survey Unit: 707110

Building: B707

Description: B707 2nd floor, room 220 east quadrant

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707110PBP-N016	1	14.7	N/A	
707110PBP-N017	1	11.6	N/A	
707110PBP-N018	1	37.9	N/A	
707110PBP-N019	1	79.2	N/A	
707110PBP-N020	1	14.7	N/A	

Comments: 100% of accessible floor surfaces scanned. All values <300 dpm/100 cm2.



**RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707110

Classification: 1

Building: 707

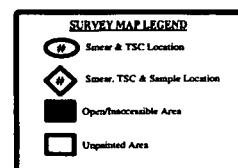
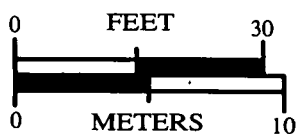
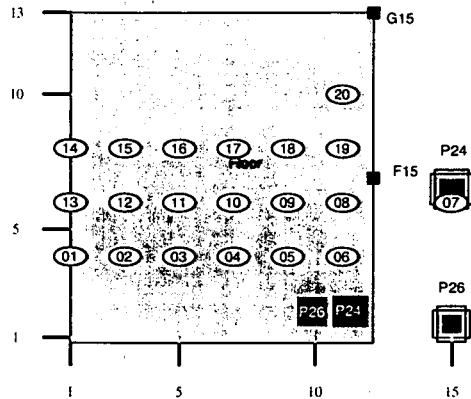
Survey Unit Description: Room 220 (northeast side)

Total Floor Area: 134 sq. m

Total Area: 134 sq. m

Grid Size: 2 m x 2 m

**SURVEY UNIT 707110 - MAP 1 OF 1**



220

ATTACHMENT B21

Survey Unit 707111 Survey Data and Maps

ATTACHMENT B22

Survey Unit 707112 Survey Data and Maps

Survey Area: B

Survey Unit: 707111

Building: B707

Description: B707, 2nd floor, room 220 east quadrant

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 36.5 dpm/100cm<sup>2</sup>  
Minimum: -6.3 dpm/100cm<sup>2</sup>  
Mean: 16.9 dpm/100cm<sup>2</sup>  
Standard Deviation: 12.3  
QC Maximum: 39.2 dpm/100cm<sup>2</sup>  
QC Minimum: 5.8 dpm/100cm<sup>2</sup>  
QC Mean: -22.5 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 1.5 dpm/100cm<sup>2</sup>  
Minimum: -0.3 dpm/100cm<sup>2</sup>  
Mean: 0.5 dpm/100cm<sup>2</sup>  
Standard Deviation: 0.8  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

223

Survey Area: B

Survey Unit: 707-111

Building: B707

Description: B707 2nd floor, room 220 east quadrant

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	704000	07/31/04	Electra	1384	DP-6	01/15/04	0.212	NA	48.0	NA	T/S
2	701418	07/31/04	Electra	1549	DP-6	08/24/04	0.227	NA	48.0	NA	T/S
3	704000	07/31/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	704000	07/31/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707111

Building: B707

Description: B707 2nd floor room 220 east quadrant

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707111PRP-N001	3	1.2	N/A	
707111PRP-N002	4	1.5	N/A	
707111PRP-N003	3	-0.3	N/A	
707111PRP-N004	4	0.0	N/A	
707111PRP-N005	3	-0.3	N/A	
707111PRP-N006	4	1.5	N/A	
707111PRP-N007	3	1.2	N/A	
707111PRP-N008	4	0.0	N/A	
707111PRP-N009	3	-0.3	N/A	
707111PRP-N010	4	1.5	N/A	
707111PRP-N011	3	-0.3	N/A	
707111PRP-N012	4	1.5	N/A	
707111PRP-N013	3	-0.3	N/A	
707111PRP-N014	4	0.0	N/A	
707111PRP-N015	3	1.2	N/A	

Comments:

225

Survey Area: B

Survey Unit: 707111

Building: B707

Description: B707 2nd floor room 220 east quadrant

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707111QRP-N001	1	5.8	N/A	
707111PRP-N001	2	21.9	N/A	
707111PRP-N002	2	15.8	N/A	
707111PRP-N003	1	-0.2	N/A	
707111QRP-N003	2	39.2	N/A	
707111PRP-N004	2	15.8	N/A	
707111PRP-N005	1	22.0	N/A	
707111PRP-N006	1	6.4	N/A	
707111PRP-N007	2	27.7	N/A	
707111PRP-N008	1	-6.3	N/A	
707111PRP-N009	2	27.7	N/A	
707111PRP-N010	2	33.4	N/A	
707111PRP-N011	1	3.1	N/A	
707111PRP-N012	1	22.0	N/A	
707111PRP-N013	1	12.5	N/A	
707111PRP-N014	1	15.8	N/A	
707111PRP-N015	2	36.5	N/A	

Comments: 100% scan performed on accessible floor surfaces and adjacent equipment. All values <300 dpm/100 cm2.

**RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707112

Classification: 1

Building: 707

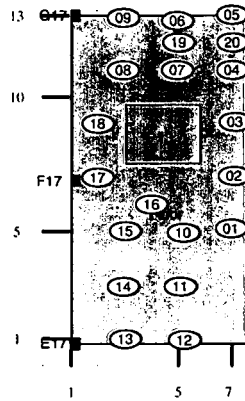
Survey Unit Description: Room 220 (northeast side)

Total Floor Area: 80 sq. m

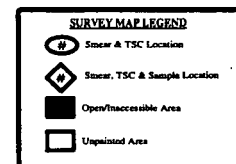
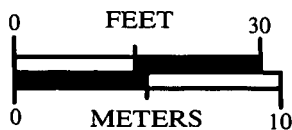
Total Area: 80 sq. m

Grid Size: 2 m x 2 m

**SURVEY UNIT 707112 - MAP 1 OF 1**



Scanned Area



227



ATTACHMENT B23

Survey Unit 707115 Survey Data and Maps

**Survey Area:** R**Survey Unit:** 707.115**Building:** 707**Description:** Second floor, room 200 ceiling and walls (west end)

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 27.2 dpm/100cm<sup>2</sup>Minimum: -10.7 dpm/100cm<sup>2</sup>Mean: 7.2 dpm/100cm<sup>2</sup>

Standard Deviation: 10.6

QC Maximum: 25.8 dpm/100cm<sup>2</sup>QC Minimum: -0.2 dpm/100cm<sup>2</sup>QC Mean: 12.8 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 2.1 dpm/100cm<sup>2</sup>Minimum: -0.9 dpm/100cm<sup>2</sup>Mean: -0.1 dpm/100cm<sup>2</sup>

Standard Deviation: 1.0

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: R

Survey Unit: 707.115

Building: 707

Description: Second floor, room 200 ceiling and walls (west end)

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	513185	10/06/04	Electra	1826	DP-6	03/20/05	0.227	NA	48.0	NA	T
2	514510	10/06/04	Electra	3980	DP-6	03/21/05	0.219	NA	48.0	NA	Q
3	514510	10/06/04	SAC-4	1471	NA	02/28/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: R

Survey Unit: 707115

Building: 707

Description: Second floor, room 200 ceiling and walls (west end)

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707115PRP-N001	3	-0.9	N/A	
707115PRP-N002	3	-0.9	N/A	
707115PRP-N003	3	-0.9	N/A	
707115PRP-N004	3	-0.9	N/A	
707115PRP-N005	3	0.6	N/A	
707115PRP-N006	3	0.6	N/A	
707115PRP-N007	3	0.6	N/A	
707115PRP-N008	3	0.6	N/A	
707115PRP-N009	3	0.6	N/A	
707115PRP-N010	3	2.1	N/A	
707115PRP-N011	3	0.6	N/A	
707115PRP-N012	3	-0.9	N/A	
707115PRP-N013	3	-0.9	N/A	
707115PRP-N014	3	-0.9	N/A	
707115PRP-N015	3	-0.9	N/A	

Comments:

231

Survey Area: R

Survey Unit: 707115

Building: 707

Description: Second floor, room 200 ceiling and walls (west end)

## Random/QC Total Surface Activity Data Sheet

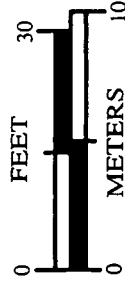
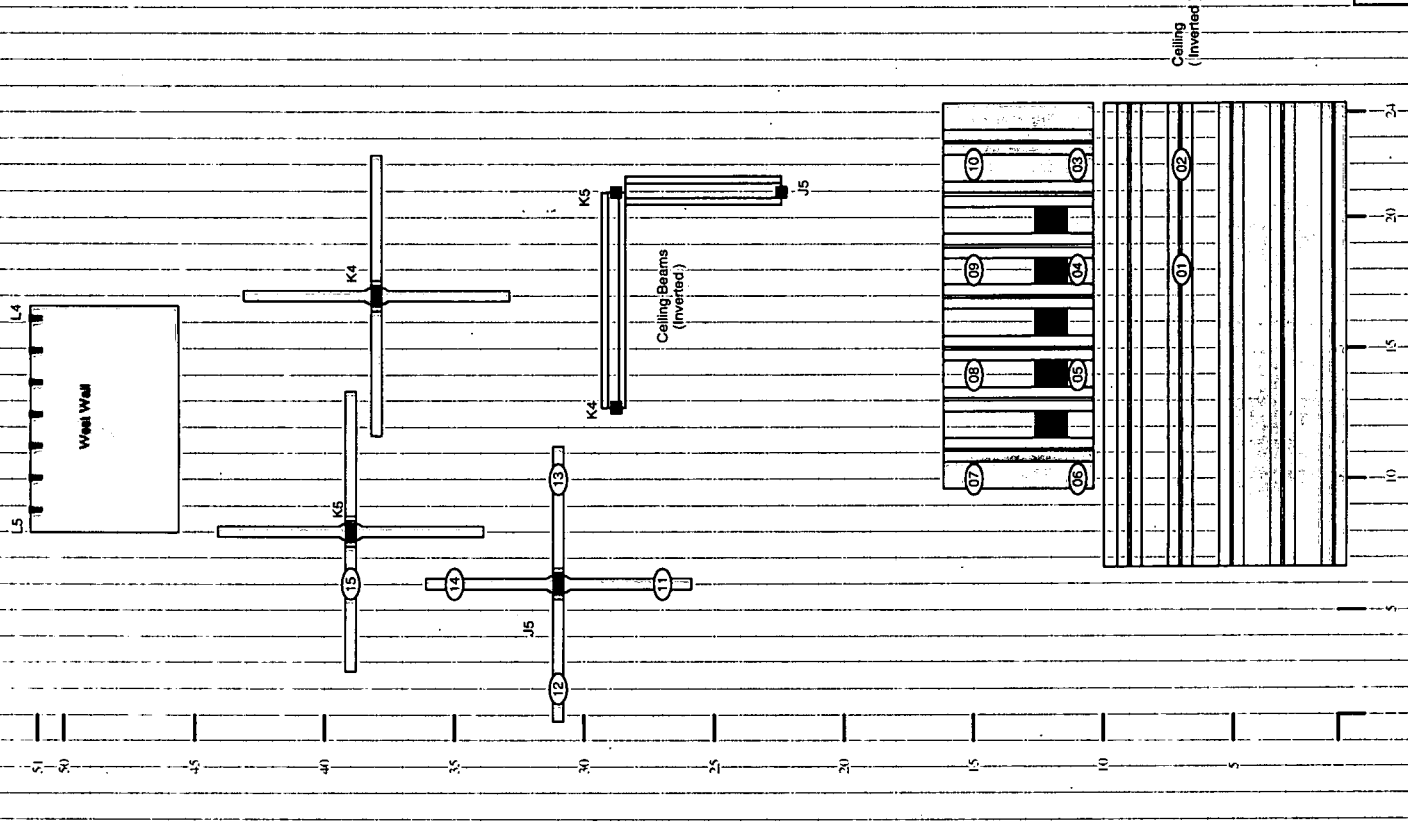
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707115PRP-N001	1	0.7	N/A	
707115PRP-N002	1	21.5	N/A	
707115PRP-N003	1	5.2	N/A	
707115PRP-N004	1	2.5	N/A	
707115PRP-N005	1	9.6	N/A	
707115PRP-N006	1	0.7	N/A	
707115PRP-N007	1	12.6	N/A	
707115PRP-N008	1	6.9	N/A	
707115PRP-N009	1	15.7	N/A	
707115QRP-N009	2	-0.2	N/A	
707115PRP-N010	1	-1.9	N/A	
707115PRP-N011	1	-10.7	N/A	
707115PRP-N012	1	-6.3	N/A	
707115PRP-N013	1	3.8	N/A	
707115PRP-N014	1	27.2	N/A	
707115QRP-N014	2	25.8	N/A	
707115PRP-N015	1	20.1	N/A	

Comments: Scanned 100% of the accessible lower wall surfaces and 50% scan on upper walls and ceiling surfaces. All values <300 dpm/100 cm<sup>2</sup>.

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B      Survey Unit: 707115      Classification: 1  
 Building: 707  
 Survey Unit Description: Second Floor Room 200 ceiling and walls (west end)  
 Total Floor Area: NA      Total Area: 322 sq. m      Grid Size: 4m x 4m

**SURVEY UNIT 707115 - MAP 1 OF 1**



Scanned Area



## **SURVEY MAP LEGEND**

- Same as TSC Location
- Same, TSC & Sample Location
- Open/Accessible Area
- Area in Another Location

ATTACHMENT B24

Survey Unit 707116 Survey Data and Maps

**Survey Area:** R**Survey Unit:** 707116**Building:** 707

Description: Second floor - annex walls and ceiling (east end)

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 39.4 dpm/100cm<sup>2</sup>Minimum: -22.2 dpm/100cm<sup>2</sup>Mean: 10.5 dpm/100cm<sup>2</sup>

Standard Deviation: 14.5

QC Maximum: 13.9 dpm/100cm<sup>2</sup>QC Minimum: 5.5 dpm/100cm<sup>2</sup>QC Mean: 9.7 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: -0.3 dpm/100cm<sup>2</sup>Mean: 0.7 dpm/100cm<sup>2</sup>

Standard Deviation: 1.3

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.



Survey Area: R

Survey Unit: 707116

Building: 707

Description: Second floor - annex walls and ceiling (east end)

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	701564	10/03/04	Electra	4400	DP-6	12/04/04	0.227	NA	48.0	NA	T/S
2	516676	10/03/04	Electra	4679	DP-6	01/23/05	0.298	NA	48.0	NA	T/S
3	516676	10/03/04	SAC-4	837	NA	12/09/04	0.333	NA	10.0	NA	R
4	516676	10/03/04	SAC-4	1196	NA	01/28/05	0.333	NA	10.0	NA	R
5	516676	10/03/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: R

Survey Unit: 707116

Building: 707

Description: Second floor - annex walls and ceiling (east end)

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707116PRP-N001	3	3.0	N/A	
707116PRP-N002	4	2.7	N/A	
707116PRP-N003	5	0.0	N/A	
707116PRP-N004	3	0.0	N/A	
707116PRP-N005	4	-0.3	N/A	
707116PRP-N006	5	0.0	N/A	
707116PRP-N007	3	0.0	N/A	
707116PRP-N008	4	-0.3	N/A	
707116PRP-N009	5	0.0	N/A	
707116PRP-N010	3	0.0	N/A	
707116PRP-N011	4	-0.3	N/A	
707116PRP-N012	5	0.0	N/A	
707116PRP-N013	3	0.0	N/A	
707116PRP-N014	4	2.7	N/A	
707116PRP-N015	5	3.0	N/A	

Comments:

Survey Area: R

Survey Unit: 707116

Building: 707

Description: Second floor annex walls and ceiling (east end)

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707116PRP-N001	1	12.5	N/A	
707116QRP-N001	1	5.5	N/A	
707116PRP-N002	1	20.9	N/A	
707116QRP-N002	2	13.9	N/A	
707116PRP-N003	2	-4.4	N/A	
707116PRP-N004	1	0.6	N/A	
707116PRP-N005	2	-22.2	N/A	
707116PRP-N006	2	-2.1	N/A	
707116PRP-N007	2	13.7	N/A	
707116PRP-N008	1	15.2	N/A	
707116PRP-N009	1	29.7	N/A	
707116PRP-N010	2	11.4	N/A	
707116PRP-N011	2	4.7	N/A	
707116PRP-N012	1	12.1	N/A	
707116PRP-N013	2	13.7	N/A	
707116PRP-N014	1	39.4	N/A	
707116PRP-N015	1	12.1	N/A	

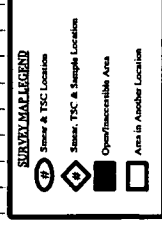
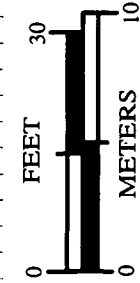
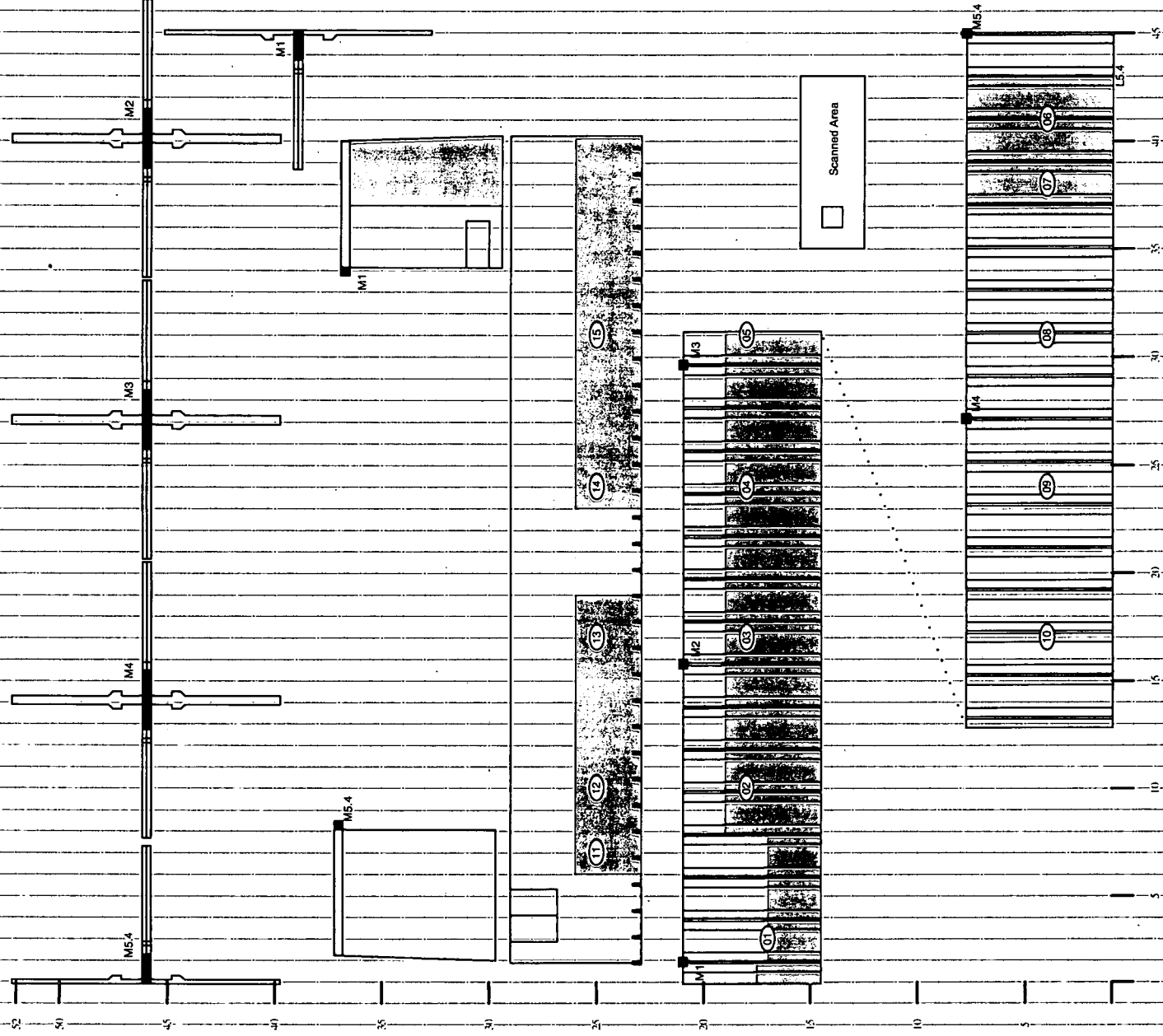
Comments: 100% of the lower walls, and 50% of the upper walls and ceiling were scanned. All values are less than 300 dpm/100 cm<sup>2</sup>.

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 776 CLUSTER**

Survey Area: C      Survey Unit: 707116      Classification: 1  
 Building: 707  
 Survey Unit Description: Second Floor- Annex walls and ceiling (east end)

Total Floor Area: NA      Total Area: 769 sq. m      Random Start Grid Size: 7m x 7m

SURVEY UNIT 707116 - MAP 1 OF 1



ATTACHMENT B25

Survey Unit 707300 Survey Data and Maps

Survey Area: B

Survey Unit: 707300

Building: 707

Description: 2nd floor annex - walls and ceiling

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 10

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 10

Nbr QC Performed: 2

#### Alpha

Maximum: 83.9 dpm/100cm<sup>2</sup>Minimum: -8.0 dpm/100cm<sup>2</sup>Mean: 16.9 dpm/100cm<sup>2</sup>

Standard Deviation: 19.1

QC Maximum: 26.1 dpm/100cm<sup>2</sup>QC Minimum: 13.2 dpm/100cm<sup>2</sup>QC Mean: 19.6 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 10

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 10

#### Alpha

Maximum: 2.7 dpm/100cm<sup>2</sup>Minimum: -0.6 dpm/100cm<sup>2</sup>Mean: 0.4 dpm/100cm<sup>2</sup>

Standard Deviation: 1.0

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: B

Survey Unit: 707300

Building: 707

Description: 2nd floor annex - walls and ceiling

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	702377	08/15/04	Electra	4175	DP-6	10/07/04	0.221	NA	48.0	NA	T/S
2	520363	08/15/04	Electra	2335	DP-6	10/19/04	0.217	NA	48.0	NA	T/S
4	510166	08/15/04	Electra	2138	DP-6	09/20/04	0.233	NA	48.0	NA	T/S
6	600638	08/15/04	Electra	4174	DP-6	12/01/04	0.210	NA	48.0	NA	T/S
7	712600	08/15/04	Electra	1826	DP-6	09/25/04	0.225	NA	48.0	NA	T/S
8	431757	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
9	511510	08/15/04	Electra	1276	DP-6	09/10/04	0.232	NA	48.0	NA	T/S
10	513731	08/15/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
11	509552	08/16/04	Electra	1276	DP-6	09/10/04	0.232	NA	48.0	NA	T/S
12	509552	08/16/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: B

Survey Unit: 707300

Building: 707

Description: 2nd floor annex walls and ceiling

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707300PRP-N001	10	-0.3	N/A	
707300PRP-N002	10	2.7	N/A	
707300PRP-N003	10	-0.3	N/A	
707300PRP-N004	8	0.9	N/A	
707300PRP-N005	8	-0.6	N/A	
707300PRP-N006	8	-0.6	N/A	
707300PRP-N007	10	-0.3	N/A	
707300PRP-N008	10	-0.3	N/A	
707300PRP-N009	10	-0.3	N/A	
707300PRP-N010	10	-0.3	N/A	
707300PRP-N011	10	1.2	N/A	
707300PRP-N012	10	2.7	N/A	
707300PRP-N013	10	-0.3	N/A	
707300PRP-N014	10	1.2	N/A	
707300PRP-N015	10	-0.3	N/A	



Survey Area: B

Survey Unit: 707300

Building: 707

Description: 2nd floor annex - walls and ceiling

**Biased Removable Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707300PBP-N016	12	0.0	N/A	
707300PBP-N017	12	1.5	N/A	
707300PBP-N018	12	0.0	N/A	
707300PBP-N019	12	0.0	N/A	
707300PBP-N020	12	1.5	N/A	
707300PBP-N021	12	0.0	N/A	
707300PBP-N022	12	0.0	N/A	
707300PBP-N023	12	1.5	N/A	
707300PBP-N024	12	1.5	N/A	
707300PBP-N025	12	0.0	N/A	

Comments:

Survey Area: B

Survey Unit: 707300

Building: 707

Description: 2nd floor annex - walls and ceiling

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707300PRP-N001	9	12.3	N/A	
707300PRP-N002	9	9.3	N/A	
707300PRP-N003	9	83.9	N/A	
707300PRP-N004	11	17.9	N/A	
707300PRP-N005	11	3.7	N/A	
707300PRP-N006	11	3.7	N/A	
707300PRP-N007	9	23.5	N/A	
707300PRP-N008	9	16.6	N/A	
707300PRP-N009	9	9.3	N/A	
707300PRP-N010	9	17.9	N/A	
707300QRP-N010	11	13.2	N/A	
707300PRP-N011	9	14.9	N/A	
707300PRP-N012	9	17.9	N/A	
707300PRP-N013	9	14.9	N/A	
707300PRP-N014	9	12.3	N/A	
707300PRP-N015	9	29.5	N/A	
707300QRP-N015	11	26.1	N/A	

Survey Area: B

Survey Unit: 707300

Building: 707

Description: 2nd floor annex - walls and ceiling

**Biased Total Surface Activity Data Sheet**

Biased Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707300PBP-N016	11	15.3	N/A	
707300PBP-N017	11	20.9	N/A	
707300PBP-N018	11	-8.0	N/A	
707300PBP-N019	11	-1.9	N/A	
707300PBP-N020	11	0.6	N/A	
707300PBP-N021	11	23.9	N/A	
707300PBP-N022	11	61.0	N/A	
707300PBP-N023	11	12.3	N/A	
707300PBP-N024	11	6.7	N/A	
707300PBP-N025	11	3.7	N/A	

Comments: 25% of the lower walls and 10% of the upper walls were scanned. All values <300 dpm/100 cm<sup>2</sup>.

2416

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: B

Survey Unit: 707300

Classification: 2

Building: 707

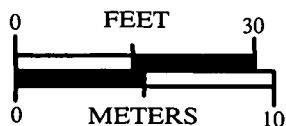
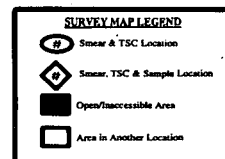
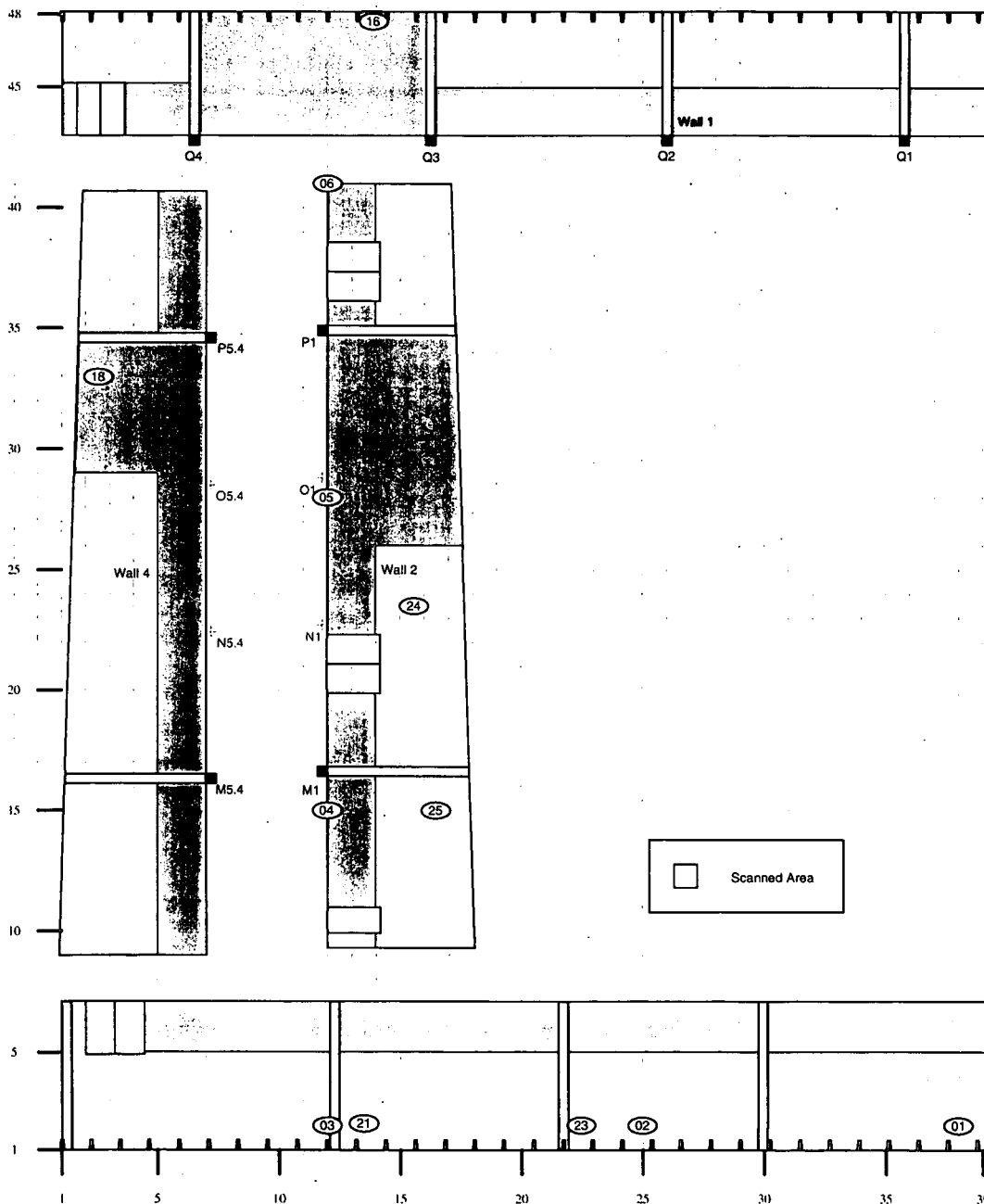
Survey Unit Description: Second Floor Annex - Walls and Ceiling

Total Floor Area: 0 sq. m

Total Area: 2901 sq. m

Random Start Grid Size: 13 x 13 sq. m

## **SURVEY UNIT 707300 - MAP 1 OF 3**



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707300

Classification: 2

Building: 707

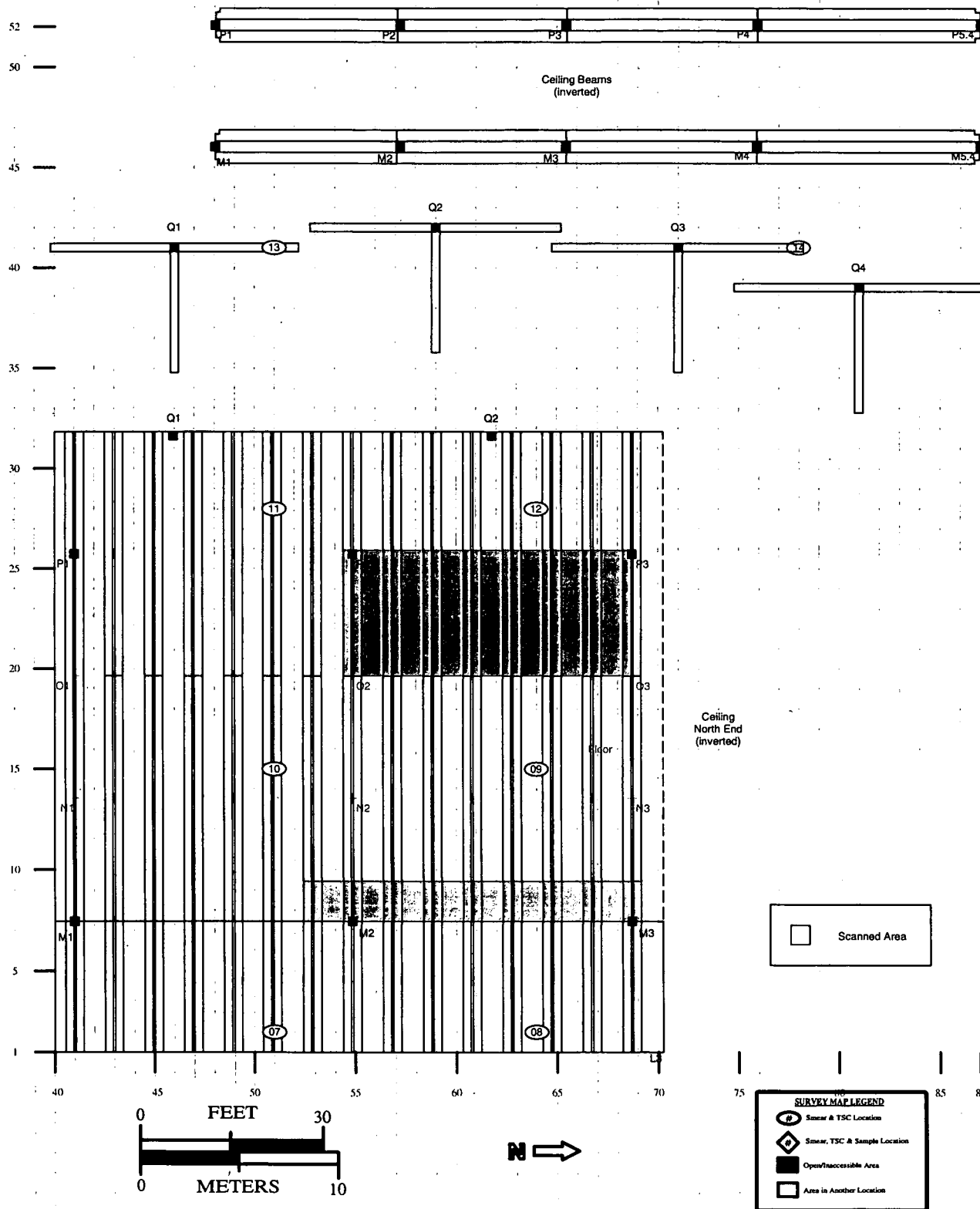
Survey Unit Description: Second Floor Annex - Walls and Ceiling

Total Floor Area: 0 sq. m

Total Area: 2901 sq. m

Random Start Grid Size: 13 x 13 sq. m

## SURVEY UNIT 707300 - MAP 2 OF 3



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B

Survey Unit: 707300

Classification: 2

Building: 707

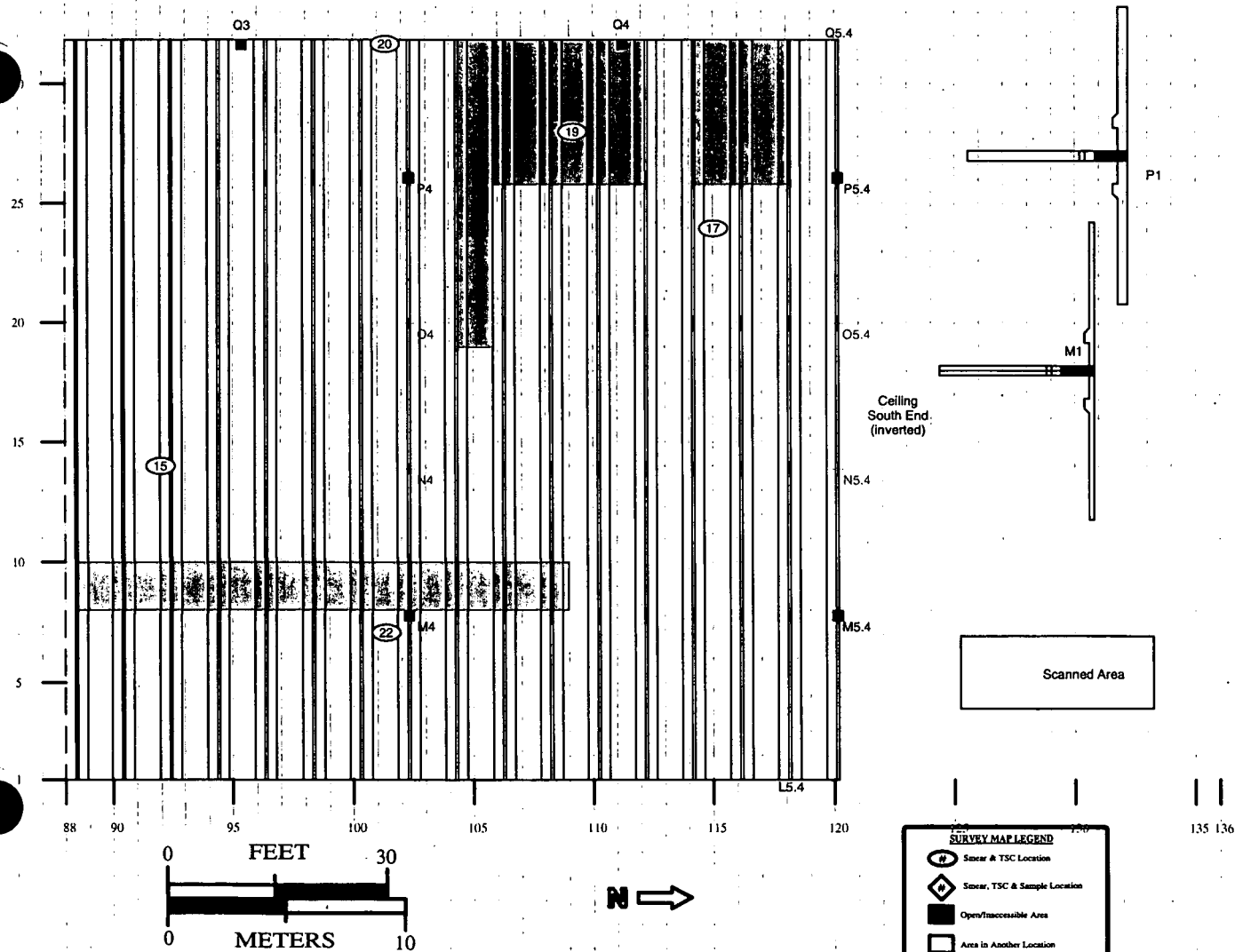
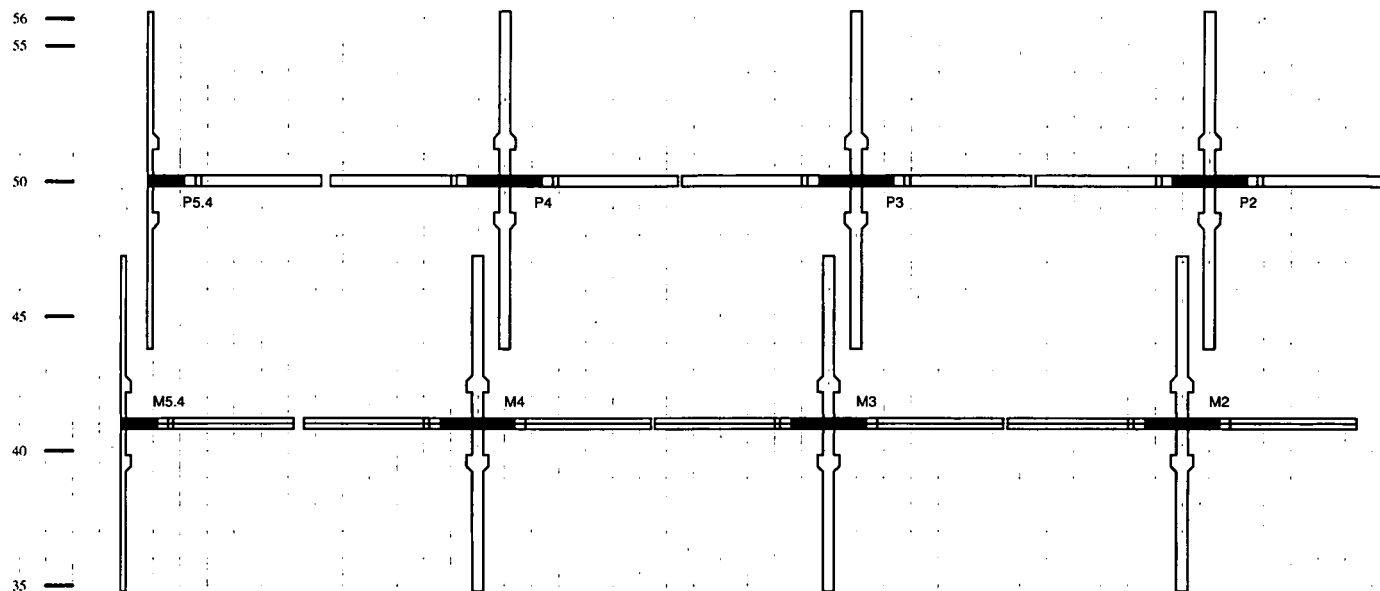
Survey Unit Description: Second Floor Annex - Walls and Ceiling

Total Floor Area: 0 sq. m

Total Area: 2901 sq. m

Random Start Grid Size: 13 x 13 sq. m

## SURVEY UNIT 707300 - MAP 3 OF 3



ATTACHMENT B26

Survey Unit 707302 Survey Data and Maps

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 220

Nbr Biased Measurements Required: 0

Nbr QC Required: 11

Nbr Random Measurements Performed: 220

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 11

#### Alpha

Maximum:	57.9 dpm/100cm <sup>2</sup>
Minimum:	-13.4 dpm/100cm <sup>2</sup>
Mean:	17.6 dpm/100cm <sup>2</sup>
Standard Deviation:	15.0
QC Maximum:	51.3 dpm/100cm <sup>2</sup>
QC Minimum:	-7.8 dpm/100cm <sup>2</sup>
QC Mean:	12.3 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>w</sub> :	100.0 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>EMC</sub> :	300.0 dpm/100cm <sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 220

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 220

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum:	12.0 dpm/100cm <sup>2</sup>
Minimum:	-0.9 dpm/100cm <sup>2</sup>
Mean:	0.7 dpm/100cm <sup>2</sup>
Standard Deviation:	1.8
Transuranic DCGL <sub>w</sub> :	20.0 dpm/100cm <sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*



Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	513731	10/04/04	Electra	3260	DP-6	02/06/05	0.207	NA	48.0	NA	T
2	516375	10/04/04	SAC-4	1196	NA	01/28/05	0.333	NA	NA	NA	R
3	514510	10/04/04	Electra	2166	DP-6	01/22/05	0.219	NA	48.0	NA	T
4	514510	10/04/04	Electra	2172	DP-6	12/30/04	0.219	NA	48.0	NA	T
5	513185	10/04/04	SAC-4	1196	NA	01/28/05	0.333	NA	NA	NA	R
6	508194	10/05/04	Electra	3977	DP-6	01/31/05	0.213	NA	48.0	NA	T
7	508194	10/05/04	SAC-4	1471	NA	02/28/05	0.333	NA	NA	NA	R
8	511798	10/05/04	Electra	4413	DP-6	03/09/05	0.208	NA	48.0	NA	T
9	512999	10/05/04	SAC-4	1469	NA	11/27/04	0.333	NA	NA	NA	R
10	513731	10/05/04	Electra	3979	DP-6	02/06/05	0.218	NA	48.0	NA	T
11	513731	10/05/04	SAC-4	837	NA	12/09/04	0.333	NA	NA	NA	R
12	516375	10/09/04	Electra	1245	DP-6	02/23/05	0.285	NA	48.0	NA	T
13	511798	10/09/04	Electra	3973	DP-6	12/22/04	0.216	NA	48.0	NA	T

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

252

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N001	2	0.0	N/A	
707302PRP-N002	2	0.0	N/A	
707302PRP-N003	2	0.0	N/A	
707302PRP-N004	2	0.0	N/A	
707302PRP-N005	2	0.0	N/A	
707302PRP-N006	2	0.0	N/A	
707302PRP-N007	2	0.0	N/A	
707302PRP-N008	2	0.0	N/A	
707302PRP-N009	2	0.0	N/A	
707302PRP-N010	2	0.0	N/A	
707302PRP-N011	2	0.0	N/A	
707302PRP-N012	2	3.0	N/A	
707302PRP-N013	2	0.0	N/A	
707302PRP-N014	2	0.0	N/A	
707302PRP-N015	2	3.0	N/A	
707302PRP-N016	2	0.0	N/A	
707302PRP-N017	2	0.0	N/A	
707302PRP-N018	2	0.0	N/A	
707302PRP-N019	2	0.0	N/A	
707302PRP-N020	2	0.0	N/A	
707302PRP-N021	2	0.0	N/A	
707302PRP-N022	2	0.0	N/A	
707302PRP-N023	2	0.0	N/A	
707302PRP-N024	2	0.0	N/A	
707302PRP-N025	2	0.0	N/A	
707302PRP-N026	2	0.0	N/A	
707302PRP-N027	2	0.0	N/A	
707302PRP-N028	2	0.0	N/A	
707302PRP-N029	2	3.0	N/A	

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N030	2	0.0	N/A	
707302PRP-N031	5	1.5	N/A	
707302PRP-N032	5	0.0	N/A	
707302PRP-N033	5	0.0	N/A	
707302PRP-N034	5	0.0	N/A	
707302PRP-N035	5	1.5	N/A	
707302PRP-N036	5	0.0	N/A	
707302PRP-N037	5	1.5	N/A	
707302PRP-N038	5	0.0	N/A	
707302PRP-N039	5	1.5	N/A	
707302PRP-N040	5	0.0	N/A	
707302PRP-N041	5	0.0	N/A	
707302PRP-N042	5	3.0	N/A	
707302PRP-N043	5	1.5	N/A	
707302PRP-N044	5	0.0	N/A	
707302PRP-N045	5	0.0	N/A	
707302PRP-N046	5	1.5	N/A	
707302PRP-N047	5	1.5	N/A	
707302PRP-N048	5	1.5	N/A	
707302PRP-N049	5	0.0	N/A	
707302PRP-N050	5	1.5	N/A	
707302PRP-N051	5	0.0	N/A	
707302PRP-N052	5	0.0	N/A	
707302PRP-N053	5	0.0	N/A	
707302PRP-N054	5	0.0	N/A	
707302PRP-N055	5	0.0	N/A	
707302PRP-N056	5	1.5	N/A	
707302PRP-N057	5	3.0	N/A	
707302PRP-N058	5	0.0	N/A	

254

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N059	5	0.0	N/A	
707302PRP-N060	5	4.5	N/A	
707302PRP-N061	7	3.0	N/A	
707302PRP-N062	7	3.0	N/A	
707302PRP-N063	7	0.0	N/A	
707302PRP-N064	7	0.0	N/A	
707302PRP-N065	7	0.0	N/A	
707302PRP-N066	7	0.0	N/A	
707302PRP-N067	7	0.0	N/A	
707302PRP-N068	7	0.0	N/A	
707302PRP-N069	7	0.0	N/A	
707302PRP-N070	7	0.0	N/A	
707302PRP-N071	7	6.0	N/A	
707302PRP-N072	7	9.0	N/A	
707302PRP-N073	7	1.5	N/A	
707302PRP-N074	7	0.0	N/A	
707302PRP-N075	7	0.0	N/A	
707302PRP-N076	7	0.0	N/A	
707302PRP-N077	7	0.0	N/A	
707302PRP-N078	7	0.0	N/A	
707302PRP-N079	7	0.0	N/A	
707302PRP-N080	7	0.0	N/A	
707302PRP-N081	7	7.5	N/A	
707302PRP-N082	7	0.0	N/A	
707302PRP-N083	7	3.0	N/A	
707302PRP-N084	7	0.0	N/A	
707302PRP-N085	7	0.0	N/A	
707302PRP-N086	7	0.0	N/A	
707302PRP-N087	7	6.0	N/A	

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N088	7	0.0	N/A	
707302PRP-N089	7	0.0	N/A	
707302PRP-N090	7	0.0	N/A	
707302PRP-N091	7	6.0	N/A	
707302PRP-N092	7	0.0	N/A	
707302PRP-N093	7	0.0	N/A	
707302PRP-N094	7	0.0	N/A	
707302PRP-N095	7	0.0	N/A	
707302PRP-N096	7	0.0	N/A	
707302PRP-N097	7	1.5	N/A	
707302PRP-N098	7	0.0	N/A	
707302PRP-N099	7	0.0	N/A	
707302PRP-N100	7	0.0	N/A	
707302PRP-N101	7	0.0	N/A	
707302PRP-N102	7	3.0	N/A	
707302PRP-N103	7	0.0	N/A	
707302PRP-N104	7	0.0	N/A	
707302PRP-N105	7	0.0	N/A	
707302PRP-N106	7	0.0	N/A	
707302PRP-N107	7	0.0	N/A	
707302PRP-N108	7	0.0	N/A	
707302PRP-N109	7	0.0	N/A	
707302PRP-N110	7	0.0	N/A	
707302PRP-N111	9	1.2	N/A	
707302PRP-N112	9	-0.3	N/A	
707302PRP-N113	9	1.2	N/A	
707302PRP-N114	9	2.7	N/A	
707302PRP-N115	9	-0.3	N/A	
707302PRP-N116	9	-0.3	N/A	

256

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N117	9	-0.3	N/A	
707302PRP-N118	9	-0.3	N/A	
707302PRP-N119	9	-0.3	N/A	
707302PRP-N120	9	-0.3	N/A	
707302PRP-N121	9	-0.3	N/A	
707302PRP-N122	9	5.7	N/A	
707302PRP-N123	9	-0.3	N/A	
707302PRP-N124	9	1.2	N/A	
707302PRP-N125	9	-0.3	N/A	
707302PRP-N126	9	-0.3	N/A	
707302PRP-N127	9	1.2	N/A	
707302PRP-N128	9	-0.3	N/A	
707302PRP-N129	9	-0.3	N/A	
707302PRP-N130	9	2.7	N/A	
707302PRP-N131	9	-0.3	N/A	
707302PRP-N132	9	-0.3	N/A	
707302PRP-N133	9	-0.3	N/A	
707302PRP-N134	9	-0.3	N/A	
707302PRP-N135	9	-0.3	N/A	
707302PRP-N136	9	1.2	N/A	
707302PRP-N137	9	1.2	N/A	
707302PRP-N138	9	-0.3	N/A	
707302PRP-N139	9	-0.3	N/A	
707302PRP-N140	9	1.2	N/A	
707302PRP-N141	7	0.0	N/A	
707302PRP-N142	7	0.0	N/A	
707302PRP-N143	7	3.0	N/A	
707302PRP-N144	7	0.0	N/A	
707302PRP-N145	7	0.0	N/A	

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N146	7	0.0	N/A	
707302PRP-N147	7	0.0	N/A	
707302PRP-N148	7	0.0	N/A	
707302PRP-N149	7	0.0	N/A	
707302PRP-N150	7	0.0	N/A	
707302PRP-N151	7	0.0	N/A	
707302PRP-N152	7	6.0	N/A	
707302PRP-N153	7	0.0	N/A	
707302PRP-N154	7	0.0	N/A	
707302PRP-N155	7	0.0	N/A	
707302PRP-N156	7	0.0	N/A	
707302PRP-N157	7	3.0	N/A	
707302PRP-N158	7	0.0	N/A	
707302PRP-N159	7	0.0	N/A	
707302PRP-N160	7	0.0	N/A	
707302PRP-N161	7	0.0	N/A	
707302PRP-N162	7	0.0	N/A	
707302PRP-N163	7	0.0	N/A	
707302PRP-N164	7	0.0	N/A	
707302PRP-N165	7	12.0	N/A	
707302PRP-N166	7	0.0	N/A	
707302PRP-N167	7	0.0	N/A	
707302PRP-N168	7	4.5	N/A	
707302PRP-N169	7	0.0	N/A	
707302PRP-N170	7	0.0	N/A	
707302PRP-N171	7	0.0	N/A	
707302PRP-N172	7	0.0	N/A	
707302PRP-N173	7	0.0	N/A	
707302PRP-N174	7	0.0	N/A	

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N175	7	0.0	N/A	
707302PRP-N176	7	0.0	N/A	
707302PRP-N177	7	1.5	N/A	
707302PRP-N178	7	0.0	N/A	
707302PRP-N179	7	0.0	N/A	
707302PRP-N180	7	0.0	N/A	
707302PRP-N181	7	0.0	N/A	
707302PRP-N182	7	0.0	N/A	
707302PRP-N183	7	3.0	N/A	
707302PRP-N184	7	3.0	N/A	
707302PRP-N185	7	0.0	N/A	
707302PRP-N186	7	1.5	N/A	
707302PRP-N187	7	1.5	N/A	
707302PRP-N188	7	1.5	N/A	
707302PRP-N189	7	0.0	N/A	
707302PRP-N190	7	0.0	N/A	
707302PRP-N191	7	0.0	N/A	
707302PRP-N192	7	0.0	N/A	
707302PRP-N193	7	3.0	N/A	
707302PRP-N194	7	0.0	N/A	
707302PRP-N195	7	6.0	N/A	
707302PRP-N196	7	0.0	N/A	
707302PRP-N197	7	0.0	N/A	
707302PRP-N198	7	6.0	N/A	
707302PRP-N199	7	0.0	N/A	
707302PRP-N200	7	0.0	N/A	
707302PRP-N201	11	-0.9	N/A	
707302PRP-N202	11	-0.9	N/A	
707302PRP-N203	11	2.1	N/A	

259



Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N204	11	-0.9	N/A	
707302PRP-N205	11	-0.9	N/A	
707302PRP-N206	11	-0.9	N/A	
707302PRP-N207	11	-0.9	N/A	
707302PRP-N208	11	-0.9	N/A	
707302PRP-N209	11	2.1	N/A	
707302PRP-N210	11	-0.9	N/A	
707302PRP-N211	11	-0.9	N/A	
707302PRP-N212	11	2.1	N/A	
707302PRP-N213	11	-0.9	N/A	
707302PRP-N214	11	-0.9	N/A	
707302PRP-N215	11	-0.9	N/A	
707302PRP-N216	11	2.1	N/A	
707302PRP-N217	11	2.1	N/A	
707302PRP-N218	11	5.1	N/A	
707302PRP-N219	11	-0.9	N/A	
707302PRP-N220	11	-0.9	N/A	

Comments:

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N001	1	57.9	N/A	
707302PRP-N002	1	31.8	N/A	
707302PRP-N003	1	25.5	N/A	
707302PRP-N004	1	-0.1	N/A	
707302PRP-N005	1	44.8	N/A	
707302PRP-N006	1	6.2	N/A	
707302PRP-N007	1	-0.1	N/A	
707302PRP-N008	1	9.6	N/A	
707302PRP-N009	1	41.5	N/A	
707302PRP-N010	1	2.8	N/A	
707302PRP-N011	1	4.7	N/A	
707302PRP-N012	1	22.1	N/A	
707302PRP-N013	1	41.5	N/A	
707302PRP-N014	1	19.2	N/A	
707302PRP-N015	1	2.8	N/A	
707302PRP-N016	1	25.5	N/A	
707302PRP-N017	1	22.1	N/A	
707302PRP-N018	1	15.8	N/A	
707302PRP-N019	1	15.8	N/A	
707302PRP-N020	1	25.5	N/A	
707302PRP-N021	1	38.6	N/A	
707302PRP-N022	1	38.6	N/A	
707302PRP-N023	1	15.8	N/A	
707302PRP-N024	1	15.8	N/A	
707302PRP-N025	1	41.5	N/A	
707302PRP-N026	1	15.8	N/A	
707302PRP-N027	1	48.2	N/A	

261

Survey Area: B

Survey Unit: 707302

Building: 707

Description: "Exterior surfaces of plenums, filter units, and air handling units"

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N028	1	51.1	N/A	
707302PRP-N029	1	22.1	N/A	
707302PRP-N030	1	51.1	N/A	
707302PRP-N031	3	19.7	N/A	
707302PRP-N032	3	13.7	N/A	
707302PRP-N033	3	7.8	N/A	
707302PRP-N034	3	7.8	N/A	
707302PRP-N035	3	13.7	N/A	
707302PRP-N036	3	13.7	N/A	
707302PRP-N037	3	-4.5	N/A	
707302PRP-N038	3	16.9	N/A	
707302QRP-N038	4	27.1	N/A	
707302PRP-N039	3	16.9	N/A	
707302PRP-N040	3	4.6	N/A	
707302PRP-N041	3	7.8	N/A	
707302PRP-N042	3	-4.5	N/A	
707302PRP-N043	3	7.8	N/A	
707302PRP-N044	3	22.9	N/A	
707302PRP-N045	3	22.9	N/A	
707302PRP-N046	3	10.5	N/A	
707302PRP-N047	3	4.6	N/A	
707302QRP-N047	4	51.3	N/A	
707302PRP-N048	3	37.9	N/A	
707302PRP-N049	3	22.9	N/A	
707302PRP-N050	3	37.9	N/A	
707302PRP-N051	3	28.8	N/A	
707302PRP-N052	3	26.1	N/A	

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N053	3	-7.7	N/A	
707302PRP-N054	3	28.8	N/A	
707302PRP-N055	3	10.5	N/A	
707302PRP-N056	3	16.9	N/A	
707302PRP-N057	3	10.5	N/A	
707302PRP-N058	3	19.7	N/A	
707302PRP-N059	3	4.6	N/A	
707302PRP-N060	3	13.7	N/A	
707302PRP-N061	6	42.9	N/A	
707302PRP-N062	6	20.9	N/A	
707302PRP-N063	6	33.5	N/A	
707302PRP-N064	6	46.2	N/A	
707302PRP-N065	6	36.8	N/A	
707302PRP-N066	6	46.2	N/A	
707302PRP-N067	6	33.5	N/A	
707302PRP-N068	6	18.0	N/A	
707302PRP-N069	6	30.3	N/A	
707302PRP-N070	6	24.1	N/A	
707302PRP-N071	6	33.5	N/A	
707302PRP-N072	6	27.4	N/A	
707302PRP-N073	6	33.5	N/A	
707302PRP-N074	6	33.5	N/A	
707302PRP-N075	6	11.5	N/A	
707302PRP-N076	6	24.1	N/A	
707302PRP-N077	6	14.8	N/A	
707302PRP-N078	6	18.0	N/A	
707302PRP-N079	6	36.8	N/A	

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N080	6	55.6	N/A	
707302PRP-N081	6	30.3	N/A	
707302PRP-N082	6	42.9	N/A	
707302PRP-N083	6	18.0	N/A	
707302PRP-N084	6	33.5	N/A	
707302PRP-N085	6	24.1	N/A	
707302PRP-N086	6	14.8	N/A	
707302PRP-N087	6	14.8	N/A	
707302PRP-N088	6	27.4	N/A	
707302PRP-N089	6	46.2	N/A	
707302PRP-N090	6	55.6	N/A	
707302PRP-N091	6	18.0	N/A	
707302PRP-N092	6	11.5	N/A	
707302PRP-N093	6	8.7	N/A	
707302PRP-N094	6	14.8	N/A	
707302PRP-N095	6	18.0	N/A	
707302PRP-N096	6	14.8	N/A	
707302PRP-N097	6	2.1	N/A	
707302PRP-N098	6	-0.7	N/A	
707302QRP-N098	12	8.7	N/A	
707302PRP-N099	6	5.4	N/A	
707302PRP-N100	6	14.8	N/A	
707302PRP-N101	6	20.9	N/A	
707302PRP-N102	6	24.1	N/A	
707302PRP-N103	6	2.1	N/A	
707302PRP-N104	6	11.5	N/A	
707302PRP-N105	6	42.9	N/A	

264

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N106	6	36.8	N/A	
707302PRP-N107	6	30.3	N/A	
707302PRP-N108	6	55.6	N/A	
707302PRP-N109	6	18.0	N/A	
707302PRP-N110	6	-4.0	N/A	
707302PRP-N111	8	9.4	N/A	
707302PRP-N112	8	19.0	N/A	
707302PRP-N113	8	19.0	N/A	
707302PRP-N114	8	-3.6	N/A	
707302PRP-N115	8	9.4	N/A	
707302PRP-N116	8	9.4	N/A	
707302PRP-N117	8	12.3	N/A	
707302PRP-N118	8	-0.2	N/A	
707302PRP-N119	8	2.7	N/A	
707302PRP-N120	8	15.7	N/A	
707302PRP-N121	8	21.9	N/A	
707302PRP-N122	8	-0.2	N/A	
707302PRP-N123	8	-0.2	N/A	
707302PRP-N124	8	9.4	N/A	
707302PRP-N125	8	19.0	N/A	
707302PRP-N126	8	19.0	N/A	
707302PRP-N127	8	12.3	N/A	
707302PRP-N128	8	28.6	N/A	
707302PRP-N129	8	15.7	N/A	
707302PRP-N130	8	28.6	N/A	
707302PRP-N131	8	15.7	N/A	
707302PRP-N132	8	12.3	N/A	

265

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N133	8	15.7	N/A	
707302PRP-N134	8	19.0	N/A	
707302PRP-N135	8	12.3	N/A	
707302PRP-N136	8	12.3	N/A	
707302PRP-N137	8	6.0	N/A	
707302PRP-N138	8	31.5	N/A	
707302PRP-N139	8	9.4	N/A	
707302PRP-N140	8	12.3	N/A	
707302PRP-N141	6	5.4	N/A	
707302PRP-N142	6	20.9	N/A	
707302PRP-N143	6	2.1	N/A	
707302PRP-N144	6	11.5	N/A	
707302PRP-N145	6	27.4	N/A	
707302PRP-N146	6	14.8	N/A	
707302PRP-N147	6	-13.4	N/A	
707302PRP-N148	6	8.7	N/A	
707302PRP-N149	6	24.1	N/A	
707302PRP-N150	6	-4.0	N/A	
707302PRP-N151	6	39.6	N/A	
707302PRP-N152	6	-4.0	N/A	
707302PRP-N153	6	5.4	N/A	
707302PRP-N154	6	-0.7	N/A	
707302PRP-N155	6	30.3	N/A	
707302PRP-N156	6	20.9	N/A	
707302PRP-N157	6	18.0	N/A	
707302PRP-N158	6	-4.0	N/A	
707302PRP-N159	6	8.7	N/A	

Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N160	6	8.7	N/A	
707302PRP-N161	6	8.7	N/A	
707302PRP-N162	6	-4.0	N/A	
707302PRP-N163	6	2.1	N/A	
707302PRP-N164	6	14.8	N/A	
707302PRP-N165	6	-4.0	N/A	
707302PRP-N166	6	11.5	N/A	
707302PRP-N167	6	14.8	N/A	
707302PRP-N168	6	14.8	N/A	
707302PRP-N169	6	-0.7	N/A	
707302PRP-N170	6	5.4	N/A	
707302PRP-N171	6	2.1	N/A	
707302PRP-N172	6	5.4	N/A	
707302QRP-N172	13	9.2	N/A	
707302PRP-N173	6	-0.7	N/A	
707302PRP-N174	6	-0.7	N/A	
707302PRP-N175	6	5.4	N/A	
707302PRP-N176	6	-10.1	N/A	
707302PRP-N177	6	11.5	N/A	
707302PRP-N178	6	20.9	N/A	
707302PRP-N179	6	2.1	N/A	
707302QRP-N179	13	18.5	N/A	
707302PRP-N180	6	-0.7	N/A	
707302PRP-N181	6	14.8	N/A	
707302PRP-N182	6	-10.1	N/A	
707302PRP-N183	6	11.5	N/A	
707302PRP-N184	6	-0.7	N/A	



Survey Area: B

Survey Unit: 707302

Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N185	6	-4.0	N/A	
707302PRP-N186	6	39.6	N/A	
707302PRP-N187	6	2.1	N/A	
707302PRP-N188	6	27.4	N/A	
707302PRP-N189	6	2.1	N/A	
707302QRP-N189	13	12.0	N/A	
707302PRP-N190	6	14.8	N/A	
707302PRP-N191	6	-4.0	N/A	
707302PRP-N192	6	5.4	N/A	
707302PRP-N193	6	2.1	N/A	
707302QRP-N193	12	-7.8	N/A	
707302PRP-N194	6	24.1	N/A	
707302PRP-N195	6	5.4	N/A	
707302PRP-N196	6	2.1	N/A	
707302PRP-N197	6	8.7	N/A	
707302PRP-N198	6	24.1	N/A	
707302PRP-N199	6	14.8	N/A	
707302PRP-N200	6	2.1	N/A	
707302PRP-N201	10	23.1	N/A	
707302PRP-N202	10	-4.5	N/A	
707302PRP-N203	10	13.9	N/A	
707302QRP-N203	12	3.8	N/A	
707302PRP-N204	10	41.4	N/A	
707302PRP-N205	10	36.8	N/A	
707302PRP-N206	10	18.5	N/A	
707302PRP-N207	10	32.2	N/A	
707302PRP-N208	10	36.8	N/A	

Survey Area: B

Survey Unit: 707302

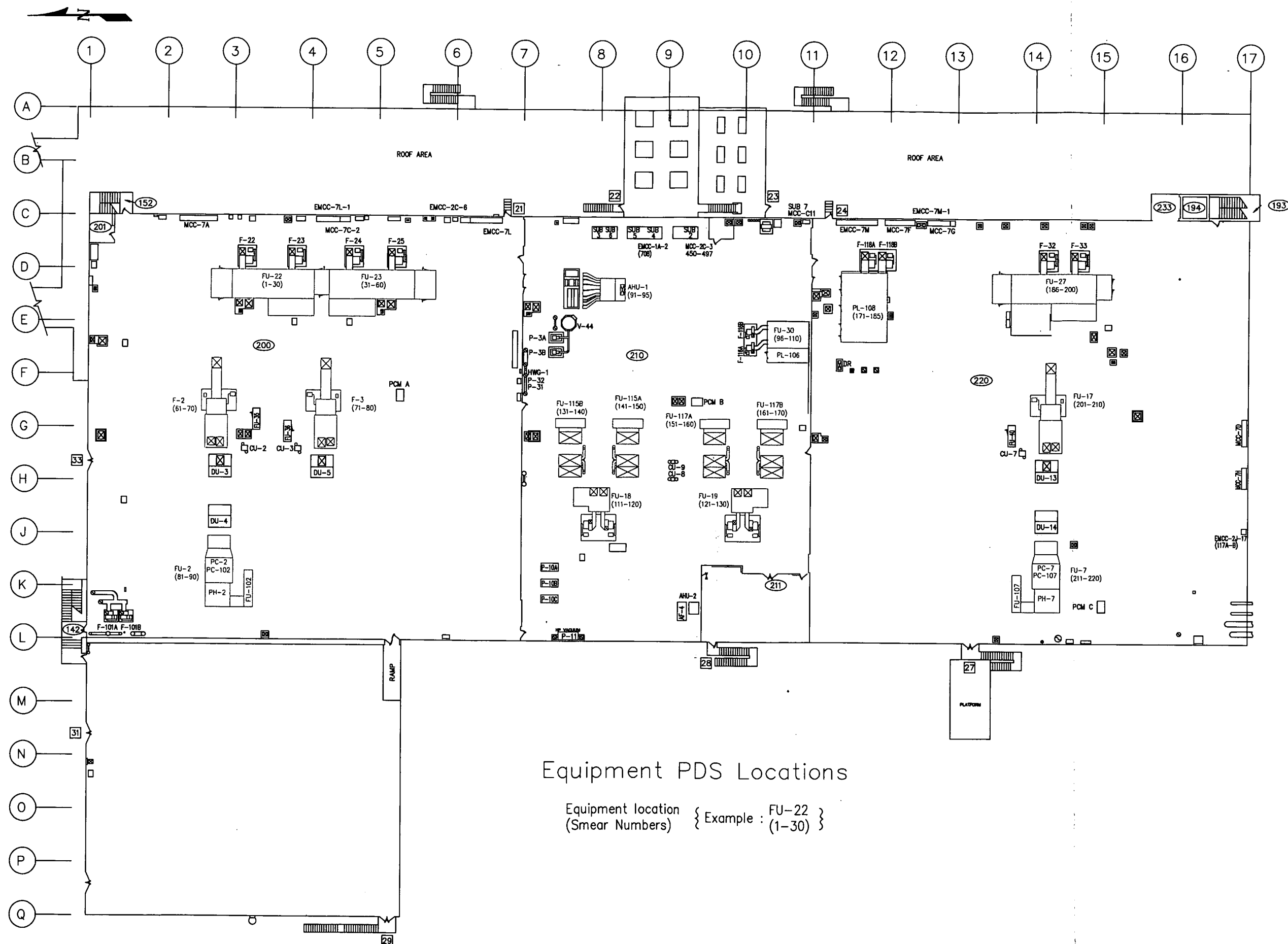
Building: 707

Description: Exterior surfaces of plenums, filter units, and air handling units

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707302PRP-N209	10	0.1	N/A	
707302QRP-N209	12	3.8	N/A	
707302PRP-N210	10	9.3	N/A	
707302PRP-N211	10	18.5	N/A	
707302PRP-N212	10	38.2	N/A	
707302PRP-N213	10	36.8	N/A	
707302PRP-N214	10	27.7	N/A	
707302PRP-N215	10	23.1	N/A	
707302QRP-N215	13	6.0	N/A	
707302PRP-N216	10	36.8	N/A	
707302PRP-N217	10	13.9	N/A	
707302PRP-N218	10	27.7	N/A	
707302QRP-N218	13	2.7	N/A	
707302PRP-N219	10	41.4	N/A	
707302PRP-N220	10	50.6	N/A	

Comments:



ATTACHMENT B27

Survey Unit 707200 Survey Data and Maps

Survey Area: D

Survey Unit: 707200

Building: 707

Description: Lower east roof (north end)

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 59.1 dpm/100cm<sup>2</sup>Minimum: 12.1 dpm/100cm<sup>2</sup>Mean: 30.8 dpm/100cm<sup>2</sup>

Standard Deviation: 15.0

QC Maximum: 34.2 dpm/100cm<sup>2</sup>QC Minimum: 33.7 dpm/100cm<sup>2</sup>QC Mean: 34.0 dpm/100cm<sup>2</sup>Transuranic DCGLW: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 14.7 dpm/100cm<sup>2</sup>Minimum: 0.0 dpm/100cm<sup>2</sup>Mean: 2.4 dpm/100cm<sup>2</sup>

Standard Deviation: 4.2

Transuranic DCGLW: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707200

Building: 707

Description: Lower east roof (north end)

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	510166	09/26/04	Electra	2124	DP-6	03/15/05	0.220	NA	48.0	NA	T/S
2	600046	09/26/04	Electra	1549	DP-6	02/21/05	0.231	NA	48.0	NA	T/S
3	431757	09/26/04	SAC-4	1471	NA	02/28/05	0.333	NA	10.0	NA	R
4	513185	09/28/04	Electra	1245	DP-6	02/23/05	0.223	NA	48.0	NA	T/S
5	514510	09/28/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707200

Building: 707

Description: Lower east roof (north end)

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707200PRP-N001	3	4.5	N/A	
707200PRP-N002	3	3.0	N/A	
707200PRP-N003	3	0.0	N/A	
707200PRP-N004	3	0.0	N/A	
707200PRP-N005	3	0.0	N/A	
707200PRP-N006	3	1.5	N/A	
707200PRP-N007	3	0.0	N/A	
707200PRP-N008	5	14.7	N/A	
707200PRP-N009	3	0.0	N/A	
707200PRP-N010	3	0.0	N/A	
707200PRP-N011	3	0.0	N/A	
707200PRP-N012	3	3.0	N/A	
707200PRP-N013	3	0.0	N/A	
707200PRP-N014	3	0.0	N/A	
707200PRP-N015	5	8.7	N/A	

Comments:

Survey Area: D

Survey Unit: 707200

Building: 707

Description: Lower east roof (north end)

**Random/QC Total Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707200PRP-N001	1	47.3	N/A	
707200PRP-N002	2	41.1	N/A	
707200PRP-N003	2	44.1	N/A	
707200PRP-N004	1	20.0	N/A	
707200PRP-N005	2	38.1	N/A	
707200PRP-N006	1	13.7	N/A	
707200PRP-N007	1	38.2	N/A	
707200PRP-N008	4	40.1	N/A	
707200PRP-N009	1	22.8	N/A	
707200PRP-N010	2	12.1	N/A	
707200PRP-N011	1	59.1	N/A	
707200QRP-N011	2	34.2	N/A	
707200PRP-N012	1	14.1	N/A	
707200QRP-N013	1	33.7	N/A	
707200PRP-N013	2	38.1	N/A	
707200PRP-N014	1	20.0	N/A	
707200PRP-N015	4	13.2	N/A	

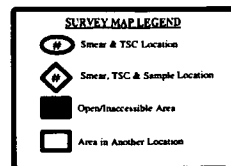
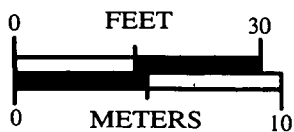
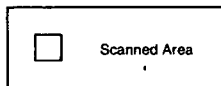
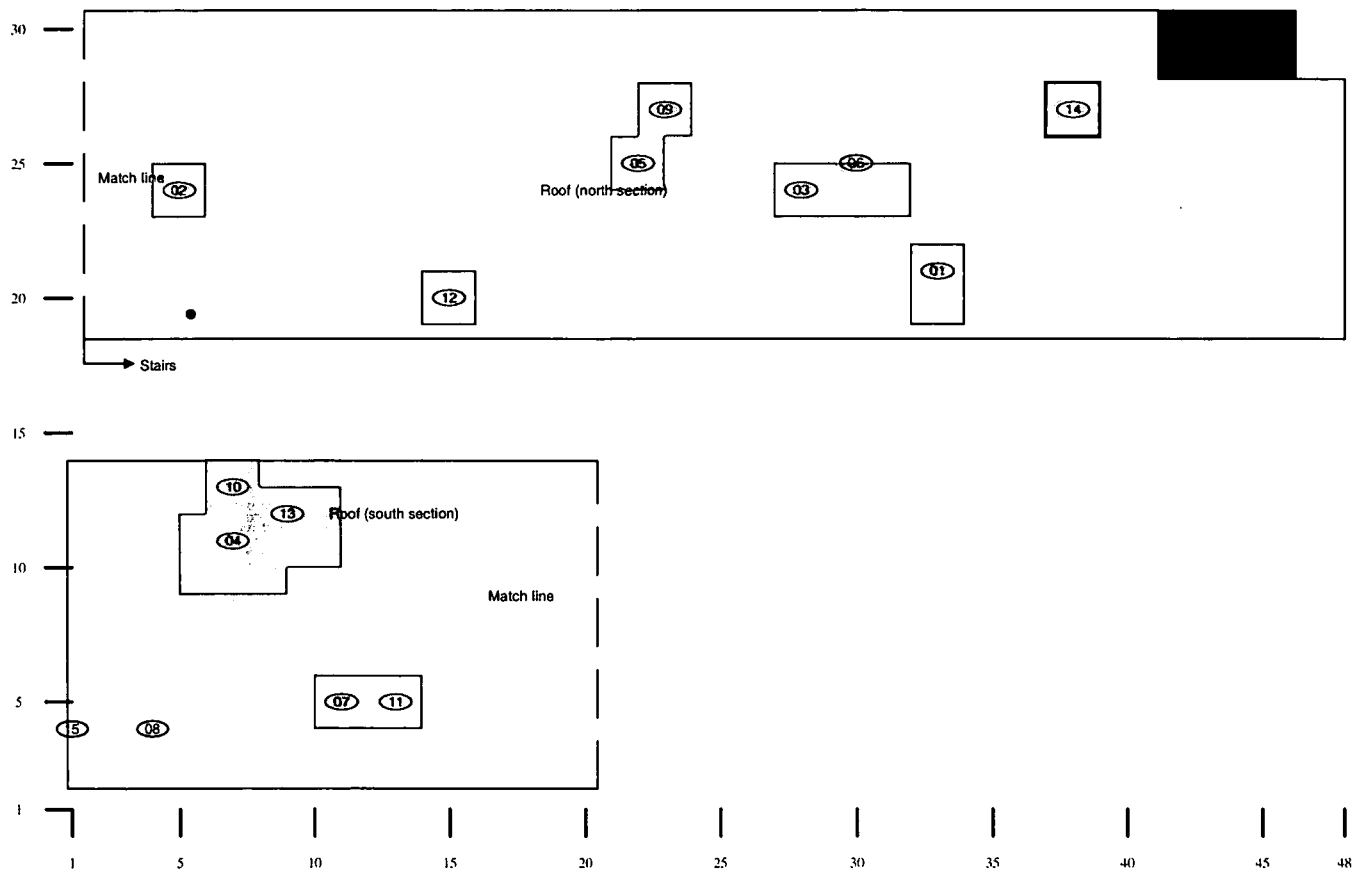
Comments: &gt;5% of the total surface area was scanned. All values &lt;300 dpm/100 cm2.



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707200      Classification: 3  
 Building: 707  
 Survey Unit Description: Lower east roof (north end)  
 Total Floor Area: N/A      Total Area: 791 sq. m      Grid Size: N/A

## **SURVEY UNIT 707200 - MAP 1 OF 1**



ATTACHMENT B28

Survey Unit 707201 Survey Data and Maps

Survey Area: D

Survey Unit: 707201

Building: 707

Description: Lower east roof (south end)

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 55.0 dpm/100cm<sup>2</sup>Minimum: 10.6 dpm/100cm<sup>2</sup>Mean: 38.0 dpm/100cm<sup>2</sup>

Standard Deviation: 11.1

QC Maximum: 63.6 dpm/100cm<sup>2</sup>QC Minimum: 5.6 dpm/100cm<sup>2</sup>QC Mean: 34.6 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>W</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: 0.0 dpm/100cm<sup>2</sup>Mean: 1.6 dpm/100cm<sup>2</sup>

Standard Deviation: 1.3

Transuranic DCGL<sub>W</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707201

Building: 707

Description: Lower east roof (south end)

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1.	510166	09/26/04	Electra	2124	DP-6	03/15/05	0.220	NA	48.0	NA	T
2	600046	09/26/04	Electra	1549	DP-6	02/21/05	0.231	NA	48.0	NA	T
3	431757	09/26/04	SAC-4	1471	NA	02/28/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707201

Building: 707

Description: Lower east roof (south end)

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707201PRP-N001	3	0.0	N/A	
707201PRP-N002	3	3.0	N/A	
707201PRP-N003	3	3.0	N/A	
707201PRP-N004	3	1.5	N/A	
707201PRP-N005	3	3.0	N/A	
707201PRP-N006	3	0.0	N/A	
707201PRP-N007	3	0.0	N/A	
707201PRP-N008	3	3.0	N/A	
707201PRP-N009	3	3.0	N/A	
707201PRP-N010	3	0.0	N/A	
707201PRP-N011	3	0.0	N/A	
707201PRP-N012	3	1.5	N/A	
707201PRP-N013	3	1.5	N/A	
707201PRP-N014	3	1.5	N/A	
707201PRP-N015	3	3.0	N/A	

Comments:

Survey Area: D

Survey Unit: 707201

Building: 707

Description: Lower east roof (south end)

## Random/QC Total Surface Activity Data Sheet

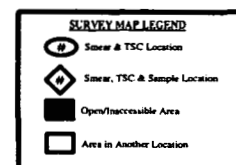
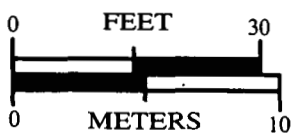
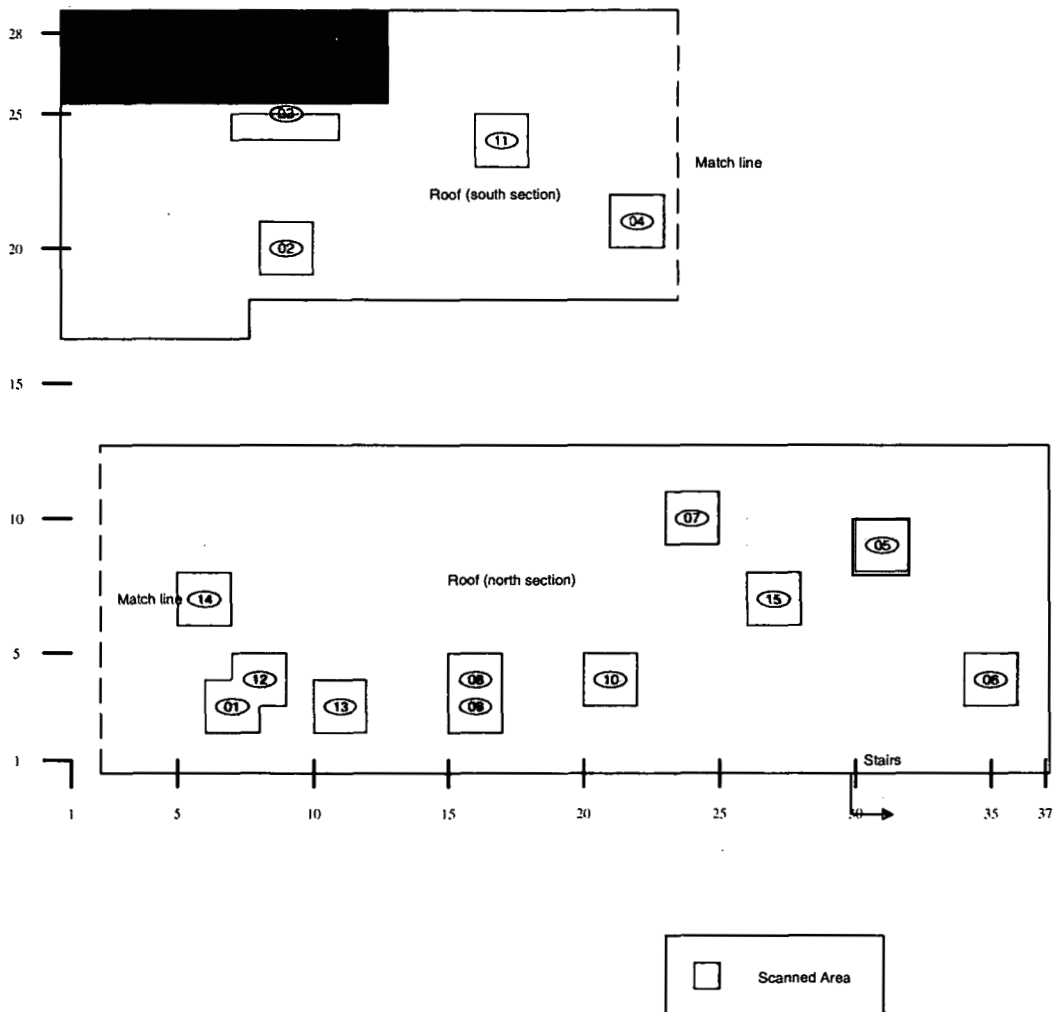
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707201PRP-N001	1	49.6	N/A	
707201PRP-N002	2	55.0	N/A	
707201PRP-N003	1	10.6	N/A	
707201PRP-N004	1	28.7	N/A	
707201PRP-N005	1	31.5	N/A	
707201PRP-N006	1	34.6	N/A	
707201PRP-N007	1	52.8	N/A	
707201PRP-N008	1	37.8	N/A	
707201PRP-N009	1	46.9	N/A	
707201PRP-N010	1	34.6	N/A	
707201PRP-N011	1	43.7	N/A	
707201PRP-N012	1	34.6	N/A	
707201QRP-N012	2	5.6	N/A	
707201PRP-N013	1	37.8	N/A	
707201PRP-N014	1	31.5	N/A	
707201QRP-N014	2	63.6	N/A	
707201PRP-N015	1	40.6	N/A	

Comments: > 5% of the accessible surfaces were scanned. All values <300 dpm/100 cm<sup>2</sup>.

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: D      Survey Unit: 707201      Classification: 3  
Building: 707  
Survey Unit Description: Lower East Roof (south end)  
Total Floor Area: N/A      Total Area: 642 sq. m      Grid Size: N/A

## SURVEY UNIT 707201 - MAP 1 OF 1



ATTACHMENT B29

Survey Unit 707202 Survey Data and Maps



Survey Area: B

Survey Unit: 707202

Building: 707

Description: Vault roof area

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 75.3 dpm/100cm<sup>2</sup>Minimum: 3.1 dpm/100cm<sup>2</sup>Mean: 39.3 dpm/100cm<sup>2</sup>

Standard Deviation: 22.5

QC Maximum: 51.1 dpm/100cm<sup>2</sup>QC Minimum: 20.9 dpm/100cm<sup>2</sup>QC Mean: 36.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 2.7 dpm/100cm<sup>2</sup>Minimum: -0.3 dpm/100cm<sup>2</sup>Mean: 0.4 dpm/100cm<sup>2</sup>

Standard Deviation: 1.3

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: B

Survey Unit: 707202

Building: 707

Description: Vault roof area

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	513185	10/10/04	Electra	3985	DP-6	02/20/05	0.230	NA	48.0	NA	T/S
2	514510	10/10/04	Electra	3972	DP-6	02/04/05	0.222	NA	48.0	NA	T/S
3	514510	10/10/04	SAC-4	760	NA	02/28/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

285

Survey Area: B

Survey Unit: 707202

Building: 707

Description: Vault roof area

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707202PRP-N001	3	-0.3	N/A	
707202PRP-N002	3	2.7	N/A	
707202PRP-N003	3	1.2	N/A	
707202PRP-N004	3	2.7	N/A	
707202PRP-N005	3	-0.3	N/A	
707202PRP-N006	3	-0.3	N/A	
707202PRP-N007	3	-0.3	N/A	
707202PRP-N008	3	-0.3	N/A	
707202PRP-N009	3	-0.3	N/A	
707202PRP-N010	3	2.7	N/A	
707202PRP-N011	3	-0.3	N/A	
707202PRP-N012	3	-0.3	N/A	
707202PRP-N013	3	-0.3	N/A	
707202PRP-N014	3	-0.3	N/A	
707202PRP-N015	3	-0.3	N/A	

Comments:

Survey Area: B

Survey Unit: 707202

Building: 707

Description: Vault roof area

## Random/QC Total Surface Activity Data Sheet

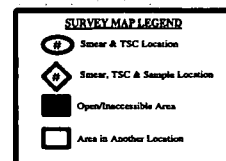
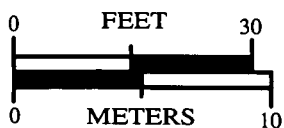
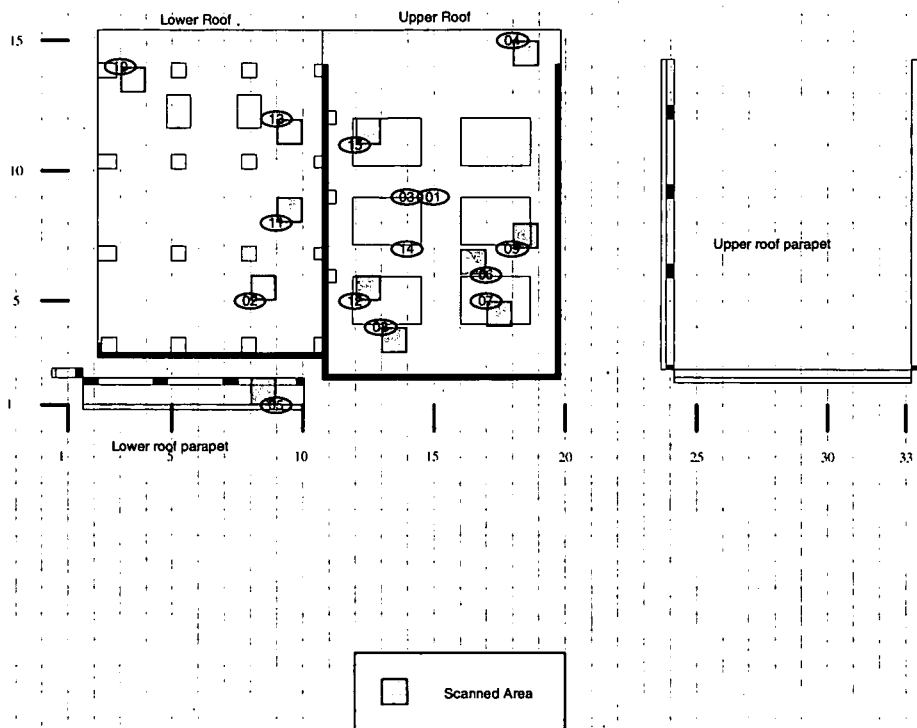
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707202PRP-N001	1	34.9	N/A	
707202PRP-N002	1	14.4	N/A	
707202PRP-N003	1	43.6	N/A	
707202PRP-N004	1	23.1	N/A	
707202PRP-N005	1	72.7	N/A	
707202QRP-N005	2	51.1	N/A	
707202PRP-N006	1	75.3	N/A	
707202PRP-N007	1	66.6	N/A	
707202PRP-N008	1	26.2	N/A	
707202PRP-N009	1	40.5	N/A	
707202PRP-N010	1	34.9	N/A	
707202PRP-N011	1	5.7	N/A	
707202PRP-N012	1	43.6	N/A	
707202PRP-N013	1	3.1	N/A	
707202PRP-N014	1	55.3	N/A	
707202QRP-N014	2	20.9	N/A	
707202PRP-N015	1	49.2	N/A	

Comments: Scanned > 5% of the roof surface. No values >300 dpm/100 cm2 detected.

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: B      Survey Unit: 707202      Classification: 3  
Building: 707  
Survey Unit Description: Main Building Exterior (Vault Roof)  
Total Floor Area: N/A      Total Area: 251 sq. m      Grid Size: N/A

## SURVEY UNIT 707202 - MAP 1 OF 1



ATTACHMENT B30

Survey Unit 707203 Survey Data and Maps

**Survey Area:** D**Survey Unit:** 707203**Building:** 707**Description:** Northeast section of the B707 main roof

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 59.1 dpm/100cm<sup>2</sup>Minimum: 19.1 dpm/100cm<sup>2</sup>Mean: 40.0 dpm/100cm<sup>2</sup>

Standard Deviation: 12.5

QC Maximum: 44.2 dpm/100cm<sup>2</sup>QC Minimum: 24.6 dpm/100cm<sup>2</sup>QC Mean: 34.4 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: -1.5 dpm/100cm<sup>2</sup>Mean: -0.2 dpm/100cm<sup>2</sup>

Standard Deviation: 1.5

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

290

Survey Area: D

Survey Unit: 707203

Building: 707

Description: Northeast section of the B707 main roof

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	511510	07/18/04	Electra	4174	DP-6	12/01/04	0.216	NA	48.0	NA	T/S
2	513185	07/18/04	Electra	4396	DP-6	09/10/04	0.212	NA	48.0	NA	T/S
3	514510	07/18/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	511798	08/25/04	Electra	4177	DP-6	02/09/05	0.217	NA	48.0	NA	T/S
5	512999	08/25/04	Electra	3260	DP-6	02/06/05	0.216	NA	48.0	NA	T/S
6	511798	08/25/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation



Survey Area: D

Survey Unit: 707203

Building: 707

Description: Northeast section of the B707 main roof

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707203PRP-N001	3	0.0	N/A	
707203PRP-N002	3	-1.5	N/A	
707203PRP-N003	3	-1.5	N/A	
707203PRP-N004	3	-1.5	N/A	
707203PRP-N005	3	1.5	N/A	
707203PRP-N006	3	-1.5	N/A	
707203PRP-N007	3	1.5	N/A	
707203PRP-N008	3	0.0	N/A	
707203PRP-N009	3	0.0	N/A	
707203PRP-N010	6	3.0	N/A	
707203PRP-N011	6	1.5	N/A	
707203PRP-N012	6	0.0	N/A	
707203PRP-N013	3	-1.5	N/A	
707203PRP-N014	3	-1.5	N/A	
707203PRP-N015	3	-1.5	N/A	

Comments:

Survey Area: D

Survey Unit: 707203

Building: 707

Description: Northeast section of the B707 main roof

## Random/QC Total Surface Activity Data Sheet

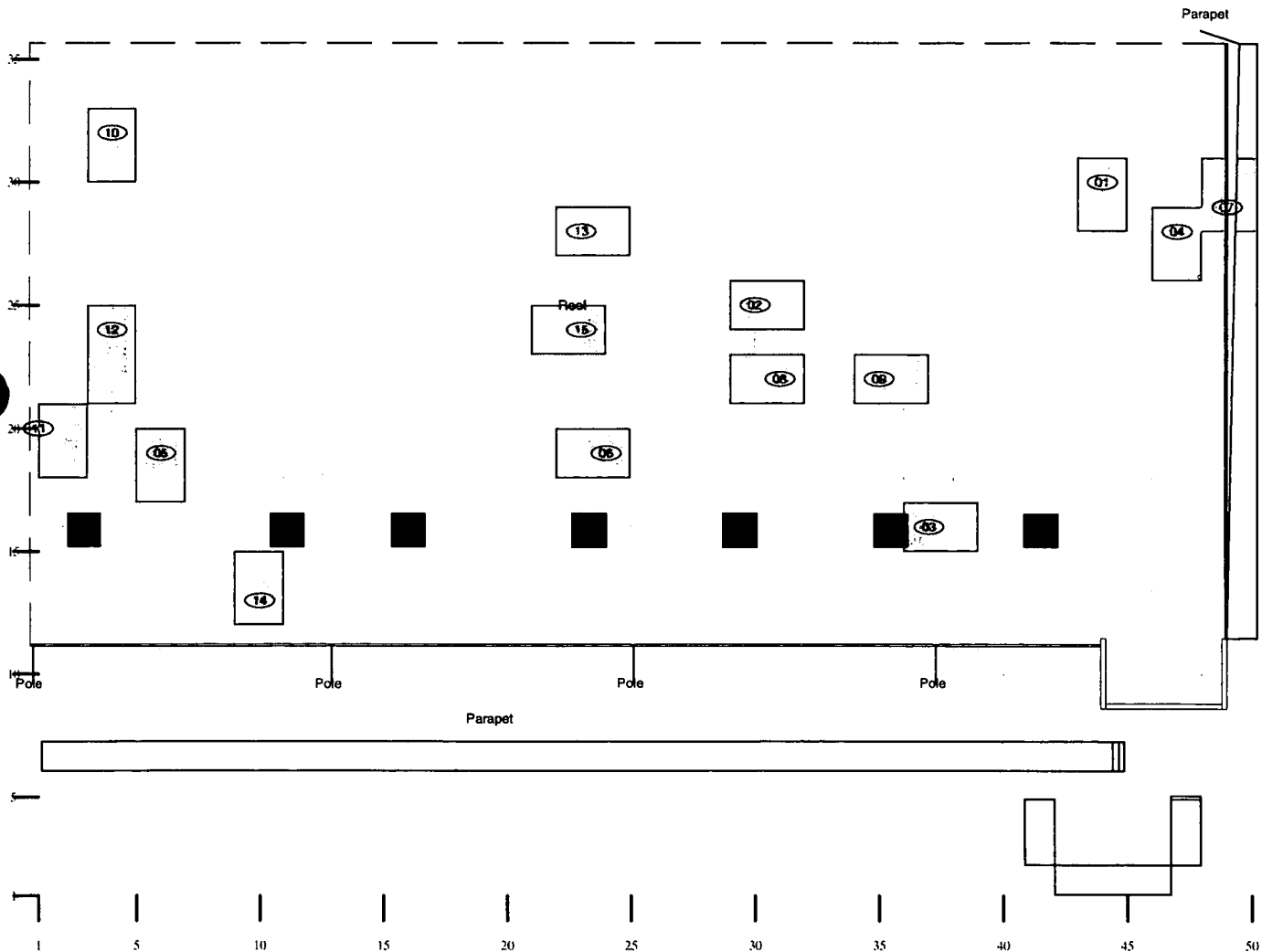
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707203PRP-N001	1	46.9	N/A	
707203PRP-N002	1	28.4	N/A	
707203PRP-N003	1	28.4	N/A	
707203PRP-N004	1	56.2	N/A	
707203PRP-N005	1	34.9	N/A	
707203QRP-N005	2	44.2	N/A	
707203PRP-N006	1	19.1	N/A	
707203PRP-N007	1	19.1	N/A	
707203PRP-N008	1	40.9	N/A	
707203PRP-N009	1	46.9	N/A	
707203PRP-N010	4	59.1	N/A	
707203PRP-N011	4	46.7	N/A	
707203QRP-N011	5	24.6	N/A	
707203PRP-N012	5	44.1	N/A	
707203PRP-N013	1	46.9	N/A	
707203PRP-N014	1	31.6	N/A	
707203PRP-N015	1	50.2	N/A	

Comments: >5% of accessible surfaces scanned. All values <300 dpm/100 cm<sup>2</sup>.

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: D      Survey Unit: 707203      Classification: 3  
 Building: 707  
 Survey Unit Description: Main Roof (northeast corner)  
 Total Floor Area: NA      Total Area: 1250 sq. m      Grid Size: N/A

SURVEY UNIT 707203 - MAP 1 OF 1



Scanned Area

0 FEET 30  
 0 METERS 10



**SURVEY MAP LEGEND**  
 (Circled #) Sensor & TSC Location  
 (Diamond #) Sensor, TSC & Sample Location  
 (Black square) Open/Inaccessible Area  
 (White square) Area in Another Location

294

ATTACHMENT B31

Survey Unit 707204 Survey Data and Maps

Survey Area: D

Survey Unit: 707204

Building: 707

Description: B707 roof - East center section of the main roof

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 51.0 dpm/100cm<sup>2</sup>Minimum: 8.0 dpm/100cm<sup>2</sup>Mean: 32.6 dpm/100cm<sup>2</sup>

Standard Deviation: 11.2

QC Maximum: 33.7 dpm/100cm<sup>2</sup>QC Minimum: 24.5 dpm/100cm<sup>2</sup>QC Mean: 29.1 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>W</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 4.2 dpm/100cm<sup>2</sup>Minimum: -0.3 dpm/100cm<sup>2</sup>Mean: 0.8 dpm/100cm<sup>2</sup>

Standard Deviation: 1.2

Transuranic DCGL<sub>W</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707204

Building: 707

Description: B707-roof - East center section of the main roof

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	511798	08/25/04	Electra	4177	DP-6	02/09/05	0.217	NA	48.0	NA	T
2	512999	08/25/04	Electra	3260	DP-6	02/06/05	0.216	NA	48.0	NA	T
3	511798	09/24/04	SAC-4	1468	NA	02/28/05	0.333	NA	10.0	NA	R
4	512999	09/24/04	SAC-4	760	NA	02/23/05	0.333	NA	10.0	NA	R
5	511798	09/25/04	Electra	2181	AP-6	02/06/05	0.149	NA	48.0	NA	S
6	512999	09/25/04	Electra	3260	DP-6	02/06/05	0.207	NA	48.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

297

Survey Area: D

Survey Unit: 707204

Building: 707

Description: B707 roof - East center section of the main roof

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707204PRP-N001	3	0.0	N/A	
707204PRP-N002	3	1.5	N/A	
707204PRP-N003	3	0.0	N/A	
707204PRP-N004	3	1.5	N/A	
707204PRP-N005	3	0.0	N/A	
707204PRP-N006	3	1.5	N/A	
707204PRP-N007	3	1.5	N/A	
707204PRP-N008	4	-0.3	N/A	
707204PRP-N009	4	1.2	N/A	
707204PRP-N010	4	-0.3	N/A	
707204PRP-N011	4	-0.3	N/A	
707204PRP-N012	4	1.2	N/A	
707204PRP-N013	4	-0.3	N/A	
707204PRP-N014	4	4.2	N/A	
707204PRP-N015	4	1.2	N/A	

Comments:

Survey Area: D

Survey Unit: 707204

Building: 707

Description: B707 roof - East center section of the main roof

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707204QRP-N001	1	33.7	N/A	
707204PRP-N001	2	47.8	N/A	
707204PRP-N002	2	38.5	N/A	
707204PRP-N003	2	29.3	N/A	
707204PRP-N004	2	8.0	N/A	
707204PRP-N005	2	17.2	N/A	
707204PRP-N006	2	51.0	N/A	
707204QRP-N007	1	24.5	N/A	
707204PRP-N007	2	26.5	N/A	
707204PRP-N008	1	26.3	N/A	
707204PRP-N009	1	32.3	N/A	
707204PRP-N010	1	35.5	N/A	
707204PRP-N011	1	41.5	N/A	
707204PRP-N012	1	32.3	N/A	
707204PRP-N013	1	41.5	N/A	
707204PRP-N014	1	35.5	N/A	
707204PRP-N015	1	26.3	N/A	

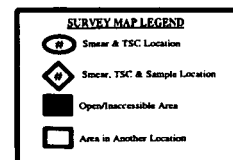
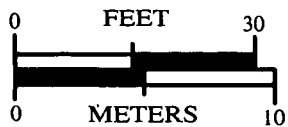
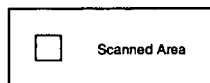
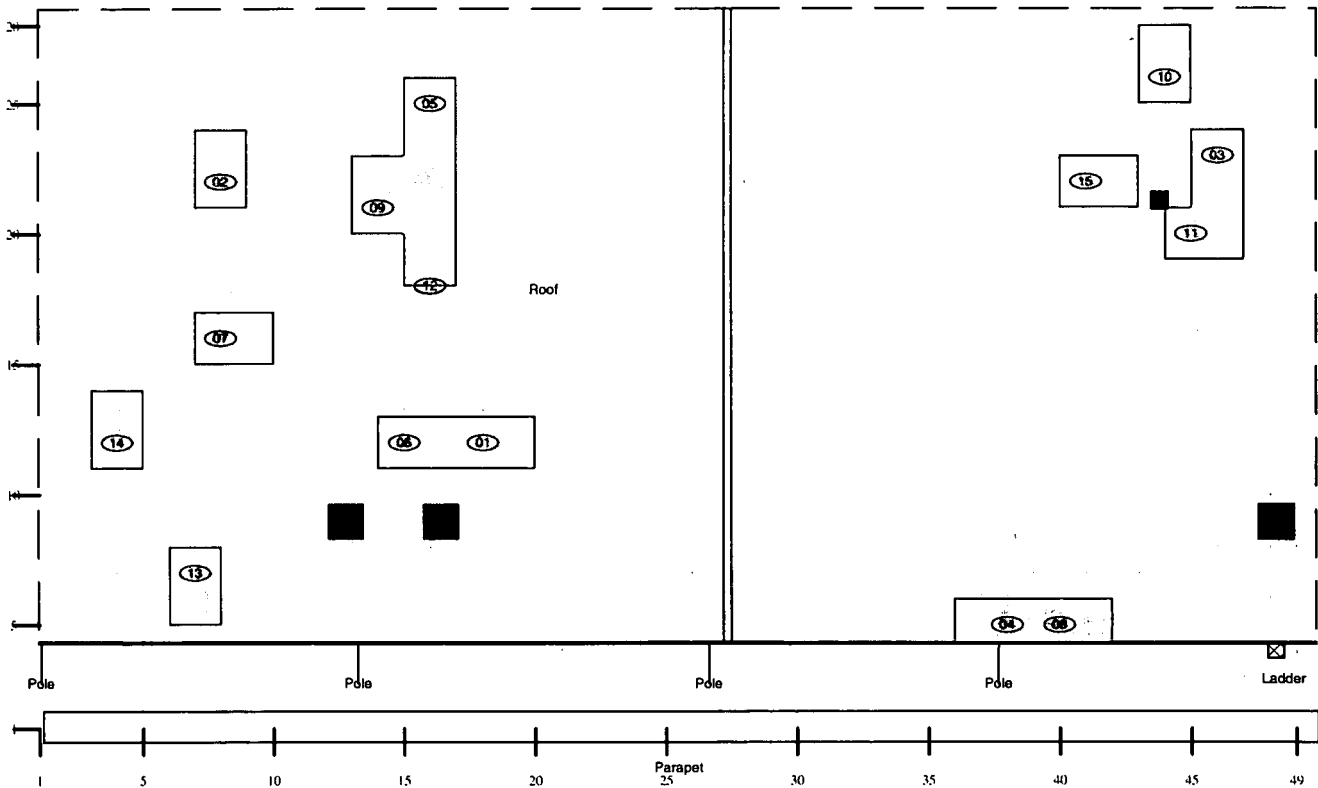
Comments: >5% of the accessible surfaces were scanned. No values > 300 dpm/100cm<sup>2</sup> were detected.



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: D      Survey Unit: 707204      Classification: 3  
Building: 707  
Survey Unit Description: Main Building Roof (east end)  
Total Floor Area: N/A      Total Area: 1243 sq. m      Grid Size: N/A

## SURVEY UNIT 707204 - MAP 1 OF 1



300

ATTACHMENT B32

Survey Unit 707205 Survey Data and Maps

Survey Area: D

Survey Unit: 707205

Building: 707

Description: B707 roof - southeast section of main roof

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 58.6 dpm/100cm<sup>2</sup>Minimum: 26.6 dpm/100cm<sup>2</sup>Mean: 39.2 dpm/100cm<sup>2</sup>

Standard Deviation: 9.9

QC Maximum: 48.3 dpm/100cm<sup>2</sup>QC Minimum: 41.8 dpm/100cm<sup>2</sup>QC Mean: 45.1 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 0.9 dpm/100cm<sup>2</sup>Minimum: -0.9 dpm/100cm<sup>2</sup>Mean: -0.1 dpm/100cm<sup>2</sup>

Standard Deviation: 0.6

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707205

Building: 707

Description: B707 roof - southeast section of main roof

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	702575	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
2	702575	08/15/04	SAC-4	1284	NA	01/29/05	0.333	NA	10.0	NA	R
3	702575	08/15/04	SAC-4	1265	NA	09/15/04	0.333	NA	10.0	NA	R
4	702575	08/15/04	SAC-4	760	NA	10/08/04	0.333	NA	10.0	NA	R
5	702575	08/15/04	SAC-4	1398	NA	09/02/04	0.333	NA	10.0	NA	R
6	711451	08/15/04	Electra	4680	DP-6	08/20/04	0.228	NA	48.0	NA	T
7	513686	08/15/04	Electra	2124	DP-6	11/18/04	0.214	NA	48.0	NA	Q
8	702418	08/15/04	Electra	1826	DP-6	09/25/04	0.225	NA	48.0	NA	S
9	712467	08/15/04	Electra	4400	DP-6	12/04/04	0.234	NA	48.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707205

Building: 707

Description: B707 roof - southeast section of main roof

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707205PRP-N001	1	-0.6	N/A	
707205PRP-N002	2	0.6	N/A	
707205PRP-N003	3	0.3	N/A	
707205PRP-N004	4	0.0	N/A	
707205PRP-N005	5	-0.6	N/A	
707205PRP-N006	1	-0.6	N/A	
707205PRP-N007	2	-0.9	N/A	
707205PRP-N008	3	0.3	N/A	
707205PRP-N009	4	0.0	N/A	
707205PRP-N010	5	0.9	N/A	
707205PRP-N011	1	-0.6	N/A	
707205PRP-N012	2	-0.9	N/A	
707205PRP-N013	3	0.3	N/A	
707205PRP-N014	4	0.0	N/A	
707205PRP-N015	5	0.9	N/A	

Comments:

Survey Area: D

Survey Unit: 707205

Building: 707

Description: B707 roof - southeast section of main roof

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707205PRP-N001	6	35.4	N/A	
707205PRP-N002	6	32.3	N/A	
707205PRP-N003	6	35.4	N/A	
707205PRP-N004	6	38.0	N/A	
707205PRP-N005	6	29.3	N/A	
707205PRP-N006	6	52.9	N/A	
707205PRP-N007	6	26.6	N/A	
707205QRP-N007	7	48.3	N/A	
707205PRP-N008	6	29.3	N/A	
707205QRP-N008	7	41.8	N/A	
707205PRP-N009	6	58.6	N/A	
707205PRP-N010	6	35.4	N/A	
707205PRP-N011	6	38.0	N/A	
707205PRP-N012	6	32.3	N/A	
707205PRP-N013	6	52.9	N/A	
707205PRP-N014	6	49.9	N/A	
707205PRP-N015	6	41.1	N/A	

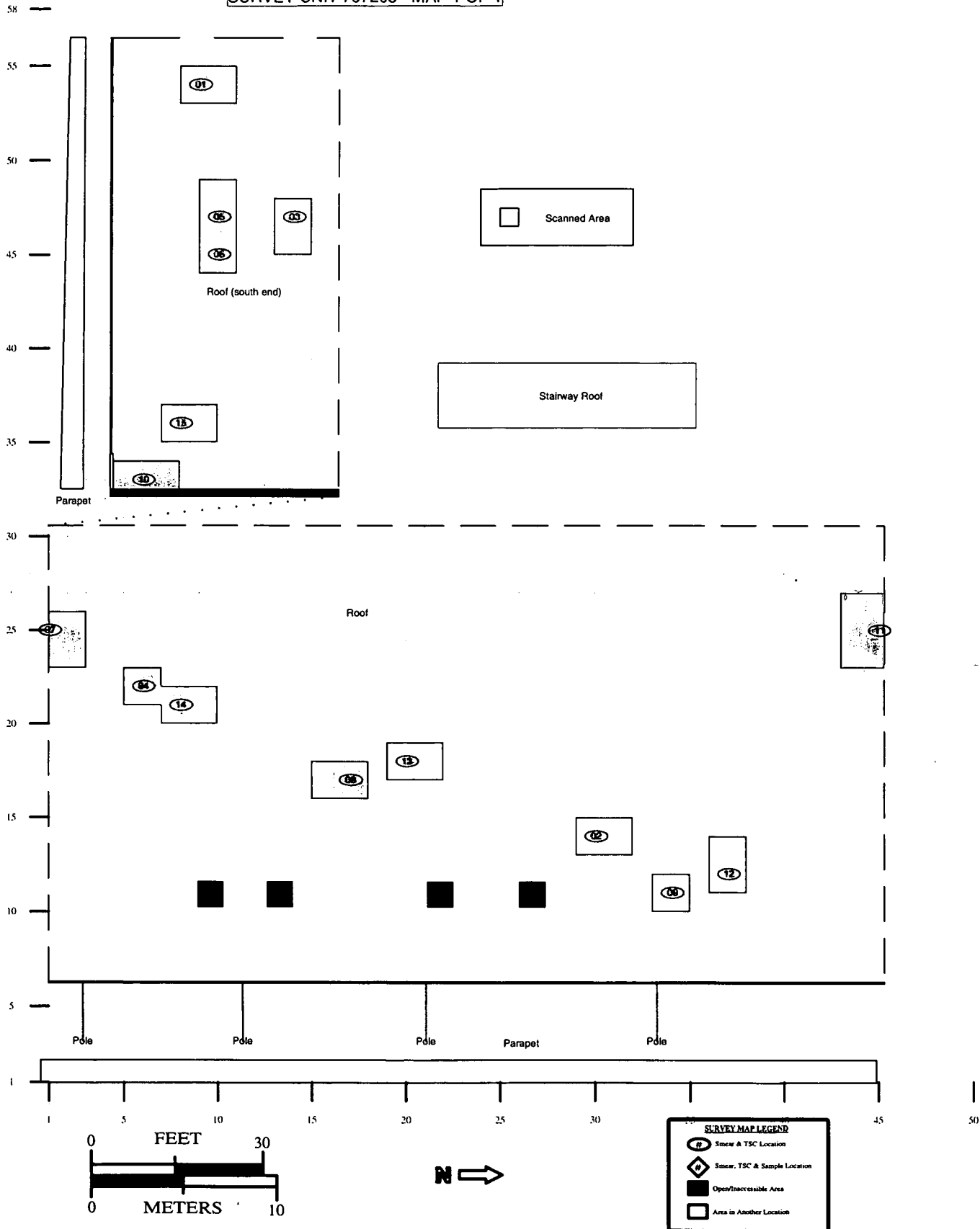
Comments: 90 square meters of this section of the roof was scanned. This is approx. 6% of the total surface area.

305

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707205      Classification: 3  
 Building: 707  
 Survey Unit Description: Main Building Roof (southeast end)  
 Total Floor Area: N/A      Total Area: 1490 sq. m      Grid Size: N/A

**SURVEY UNIT 707205 - MAP 1 OF 1**



306

ATTACHMENT B33

Survey Unit 707206 Survey Data and Maps



Survey Area: D

Survey Unit: 707206

Building: 707

Description: B707 roof - northwest section of the main roof

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 51.1 dpm/100cm<sup>2</sup>Minimum: 8.6 dpm/100cm<sup>2</sup>Mean: 36.0 dpm/100cm<sup>2</sup>

Standard Deviation: 13.0

QC Maximum: 64.2 dpm/100cm<sup>2</sup>QC Minimum: 37.9 dpm/100cm<sup>2</sup>QC Mean: 51.1 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 1.8 dpm/100cm<sup>2</sup>Minimum: -1.2 dpm/100cm<sup>2</sup>Mean: -0.2 dpm/100cm<sup>2</sup>

Standard Deviation: 0.9

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707206

Building: 707

Description: B707 roof - northwest section of the main roof

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	702575	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
2	702575	08/15/04	SAC-4	1284	NA	01/29/05	0.333	NA	10.0	NA	R
3	702575	08/15/04	SAC-4	1265	NA	09/15/04	0.333	NA	10.0	NA	R
4	702575	08/15/04	SAC-4	760	NA	10/08/04	0.333	NA	10.0	NA	R
5	702575	08/15/04	SAC-4	1398	NA	09/02/04	0.333	NA	10.0	NA	R
6	711451	08/15/04	Electra	4680	DP-6	08/20/04	0.228	NA	48.0	NA	T
7	513686	08/15/04	Electra	2124	DP-6	11/18/04	0.214	NA	48.0	NA	T
8	702418	08/15/04	Electra	1826	DP-6	09/25/04	0.225	NA	48.0	NA	T/S
9	712467	08/15/04	Electra	4400	DP-6	12/04/04	0.234	NA	48.0	NA	T/S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707206

Building: 707

Description: B707 roof - northwest section of the main roof

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707206PRP-N001	1	-0.6	N/A	
707206PRP-N002	2	-0.9	N/A	
707206PRP-N003	3	0.3	N/A	
707206PRP-N004	4	0.0	N/A	
707206PRP-N005	5	-0.6	N/A	
707206PRP-N006	1	-0.6	N/A	
707206PRP-N007	2	-0.9	N/A	
707206PRP-N008	3	1.8	N/A	
707206PRP-N009	4	1.5	N/A	
707206PRP-N010	5	-0.6	N/A	
707206PRP-N011	1	0.9	N/A	
707206PRP-N012	2	-0.9	N/A	
707206PRP-N013	3	-1.2	N/A	
707206PRP-N014	4	0.0	N/A	
707206PRP-N015	5	-0.6	N/A	

Comments:

Survey Area: D

Survey Unit: 707206

Building: 707

Description: B707 roof - northwest section of the main roof

## Random/QC Total Surface Activity Data Sheet

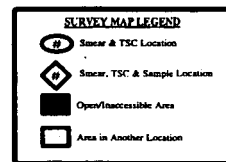
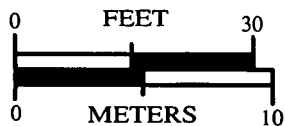
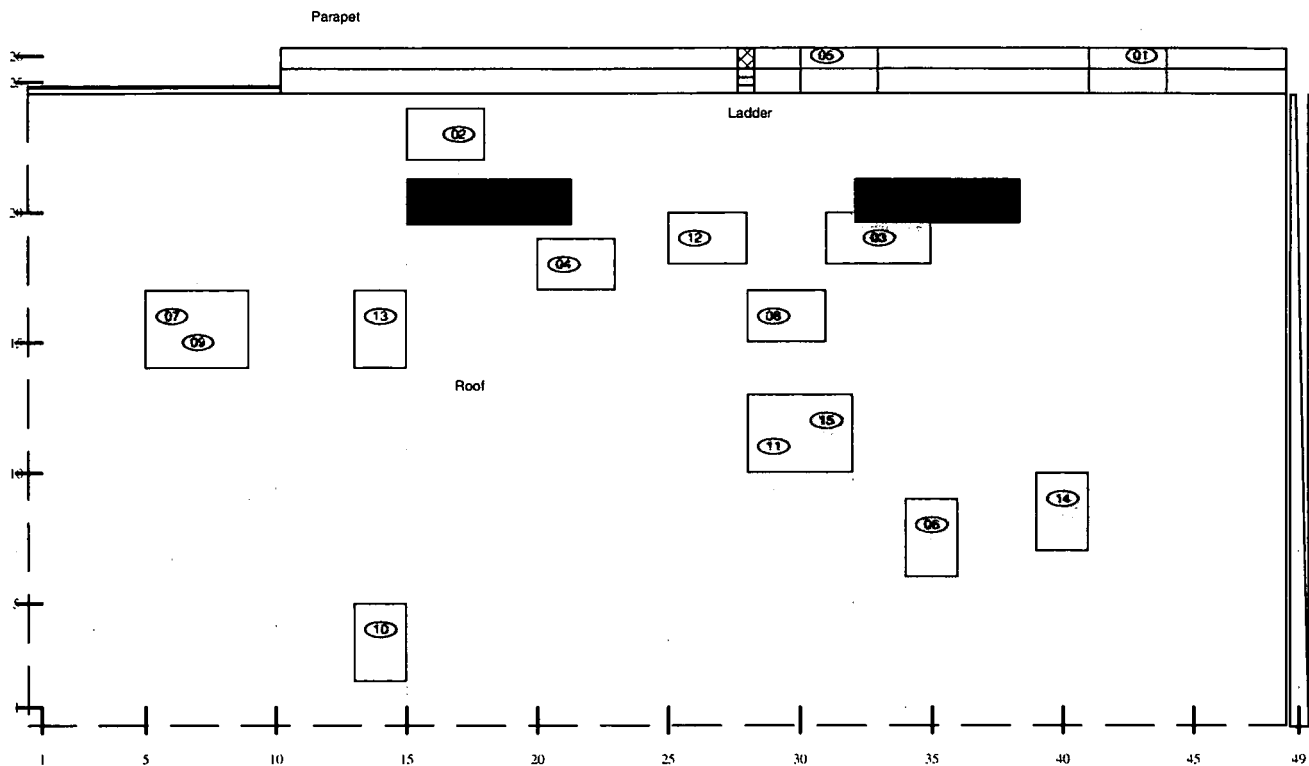
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707206PRP-N001	8	8.6	N/A	
707206PRP-N002	8	47.7	N/A	
707206PRP-N003	9	33.7	N/A	
707206PRP-N004	9	16.6	N/A	
707206PRP-N005	8	18.0	N/A	
707206PRP-N006	8	32.6	N/A	
707206PRP-N007	7	44.5	N/A	
707206PRP-N008	7	51.1	N/A	
707206PRP-N009	8	38.8	N/A	
707206PRP-N010	8	41.5	N/A	
707206PRP-N011	9	36.7	N/A	
707206QRP-N012	6	37.9	N/A	
707206PRP-N012	7	51.1	N/A	
707206PRP-N013	7	44.5	N/A	
707206PRP-N014	8	30.0	N/A	
707206QRP-N015	6	64.2	N/A	
707206PRP-N015	9	45.2	N/A	

Comments: 90 square meters of this section of the roof was scanned. This is approx. 6% of the total surface area.

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707206      Classification: 3  
 Building: 707  
 Survey Unit Description: Main Building Roof (northwest)  
 Total Floor Area: N/A      Total Area: 1228 sq. m      Grid Size: N/A

**SURVEY UNIT 707206 - MAP 1 OF 1**



ATTACHMENT B34

Survey Unit 707207 Survey Data and Maps

Survey Area: D

Survey Unit: 707207

Building: 707

Description: B707 roof - west central section

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 91.2 dpm/100cm<sup>2</sup>Minimum: 17.5 dpm/100cm<sup>2</sup>Mean: 51.2 dpm/100cm<sup>2</sup>

Standard Deviation: 17.9

QC Maximum: 43.8 dpm/100cm<sup>2</sup>QC Minimum: 40.7 dpm/100cm<sup>2</sup>QC Mean: 42.3 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 2.1 dpm/100cm<sup>2</sup>Minimum: -1.2 dpm/100cm<sup>2</sup>Mean: 0.2 dpm/100cm<sup>2</sup>

Standard Deviation: 1.0

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707207

Building: 707

Description: B707 roof-- west central section

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	514929	08/15/04	Electra	1826	DP-6	09/25/04	0.225	NA	48.0	NA	T/S
2	509231	08/15/04	Electra	4177	DP-6	02/09/05	0.217	NA	48.0	NA	T/S
3	514929	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
4	514929	08/15/04	SAC-4	1284	NA	01/29/05	0.333	NA	10.0	NA	R
5	514929	08/15/04	SAC-4	1265	NA	09/15/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation



Survey Area: D

Survey Unit: 707207

Building: 707

Description: B707 roof - west central section

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707207PRP-N001	3	0.9	N/A	
707207PRP-N002	4	0.6	N/A	
707207PRP-N003	5	0.3	N/A	
707207PRP-N004	3	-0.6	N/A	
707207PRP-N005	4	2.1	N/A	
707207PRP-N006	5	1.8	N/A	
707207PRP-N007	3	-0.6	N/A	
707207PRP-N008	4	-0.9	N/A	
707207PRP-N009	5	0.3	N/A	
707207PRP-N010	3	0.9	N/A	
707207PRP-N011	4	0.6	N/A	
707207PRP-N012	5	-1.2	N/A	
707207PRP-N013	3	-0.6	N/A	
707207PRP-N014	4	-0.9	N/A	
707207PRP-N015	5	0.3	N/A	

Comments:

Survey Area: D

Survey Unit: 707207

Building: 707

Description: B707 roof - west central section

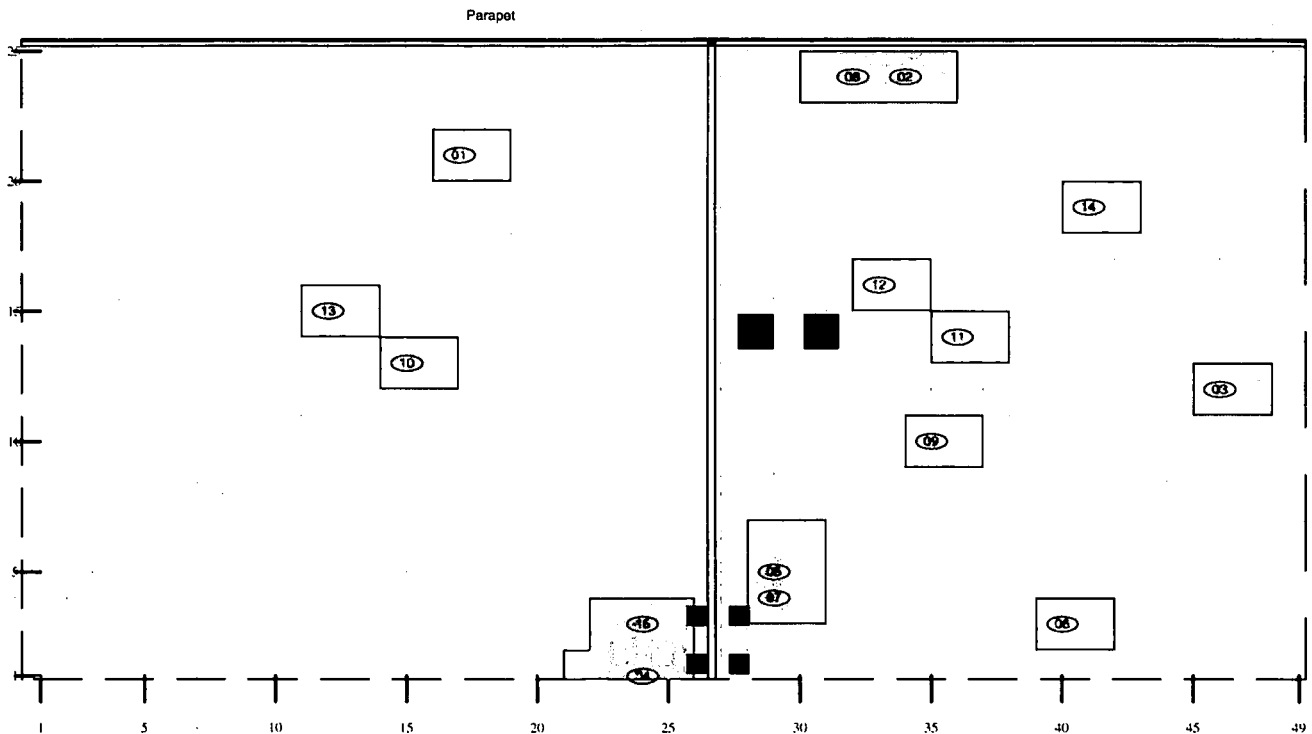
## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707207PRP-N001	2	91.2	N/A	
707207PRP-N002	2	17.5	N/A	
707207PRP-N003	2	60.3	N/A	
707207QRP-N004	1	40.7	N/A	
707207PRP-N004	2	41.9	N/A	
707207PRP-N005	2	35.9	N/A	
707207PRP-N006	2	51.1	N/A	
707207PRP-N007	2	35.9	N/A	
707207PRP-N008	2	38.7	N/A	
707207PRP-N009	2	72.8	N/A	
707207QRP-N010	1	43.8	N/A	
707207PRP-N010	2	47.9	N/A	
707207PRP-N011	2	47.9	N/A	
707207PRP-N012	2	60.3	N/A	
707207PRP-N013	2	69.6	N/A	
707207PRP-N014	2	45.1	N/A	
707207PRP-N015	2	51.1	N/A	

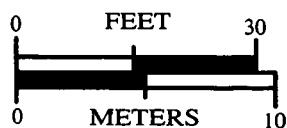
Comments: 90 square meters of this section of the roof was scanned. This is approx. 6% of the total surface area.

**Survey Area: D      Survey Unit: 707207      Classification: 3**  
**Building: 707**  
**Survey Unit Description: Main Building Roof (west end)**

SURVEY UNIT 707207 - MAP 1 OF 1



Scanned Area



### SURVEY MAP LEGEND

- Smear & TSC Location  
 Smear, TSC & Sample Location  
 Open/Inaccessible Area  
 Area in Another Location

ATTACHMENT B35

Survey Unit 707208 Survey Data and Maps

Survey Area: D

Survey Unit: 707208

Building: 707

Description: B707 roof - Southwest section

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 69.7 dpm/100cm<sup>2</sup>  
Minimum: 34.1 dpm/100cm<sup>2</sup>  
Mean: 47.9 dpm/100cm<sup>2</sup>  
Standard Deviation: 13.6  
QC Maximum: 43.1 dpm/100cm<sup>2</sup>  
QC Minimum: 27.9 dpm/100cm<sup>2</sup>  
QC Mean: 35.5 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 2.1 dpm/100cm<sup>2</sup>  
Minimum: -1.2 dpm/100cm<sup>2</sup>  
Mean: -0.1 dpm/100cm<sup>2</sup>  
Standard Deviation: 1.2  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707208

Building: 707

Description: B707 roof - Southwest section

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	509231	08/15/04	Electra	4177	DP-6	02/09/05	0.217	NA	48.0	NA	T
2	514929	08/15/04	Electra	1826	DP-6	09/25/04	0.225	NA	48.0	NA	T
3	514929	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
4	514929	08/15/04	SAC-4	1284	NA	01/29/05	0.333	NA	10.0	NA	R
5	514929	08/15/04	SAC-4	1265	NA	09/15/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

321

Survey Area: D

Survey Unit: 707208

Building: 707

Description: B707 roof, Southwest section

## Random Removable Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707208PRP-N001	3	-0.6	N/A	
707208PRP-N002	4	-0.9	N/A	
707208PRP-N003	5	-1.2	N/A	
707208PRP-N004	3	0.9	N/A	
707208PRP-N005	4	2.1	N/A	
707208PRP-N006	5	-1.2	N/A	
707208PRP-N007	3	-0.6	N/A	
707208PRP-N008	4	0.6	N/A	
707208PRP-N009	5	-1.2	N/A	
707208PRP-N010	3	0.9	N/A	
707208PRP-N011	4	2.1	N/A	
707208PRP-N012	5	-1.2	N/A	
707208PRP-N013	3	-0.6	N/A	
707208PRP-N014	4	-0.9	N/A	
707208PRP-N015	5	0.3	N/A	

Comments:

Survey Area: D

Survey Unit: 707208

Building: 707

Description: B707 roof - Southwest section

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707208PRP-N001	2	34.1	N/A	
707208PRP-N002	2	48.8	N/A	
707208PRP-N003	2	34.1	N/A	
707208PRP-N004	2	66.6	N/A	
707208PRP-N005	2	69.7	N/A	
707208PRP-N006	2	34.1	N/A	
707208QRP-N007	1	27.9	N/A	
707208PRP-N007	2	34.1	N/A	
707208PRP-N008	2	34.1	N/A	
707208PRP-N009	2	60.8	N/A	
707208PRP-N010	2	51.9	N/A	
707208QRP-N011	1	43.1	N/A	
707208PRP-N011	2	66.6	N/A	
707208PRP-N012	2	55.0	N/A	
707208PRP-N013	2	43.0	N/A	
707208PRP-N014	2	34.1	N/A	
707208PRP-N015	2	51.9	N/A	

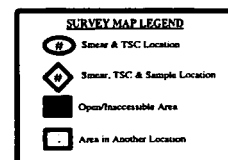
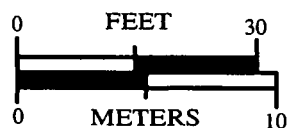
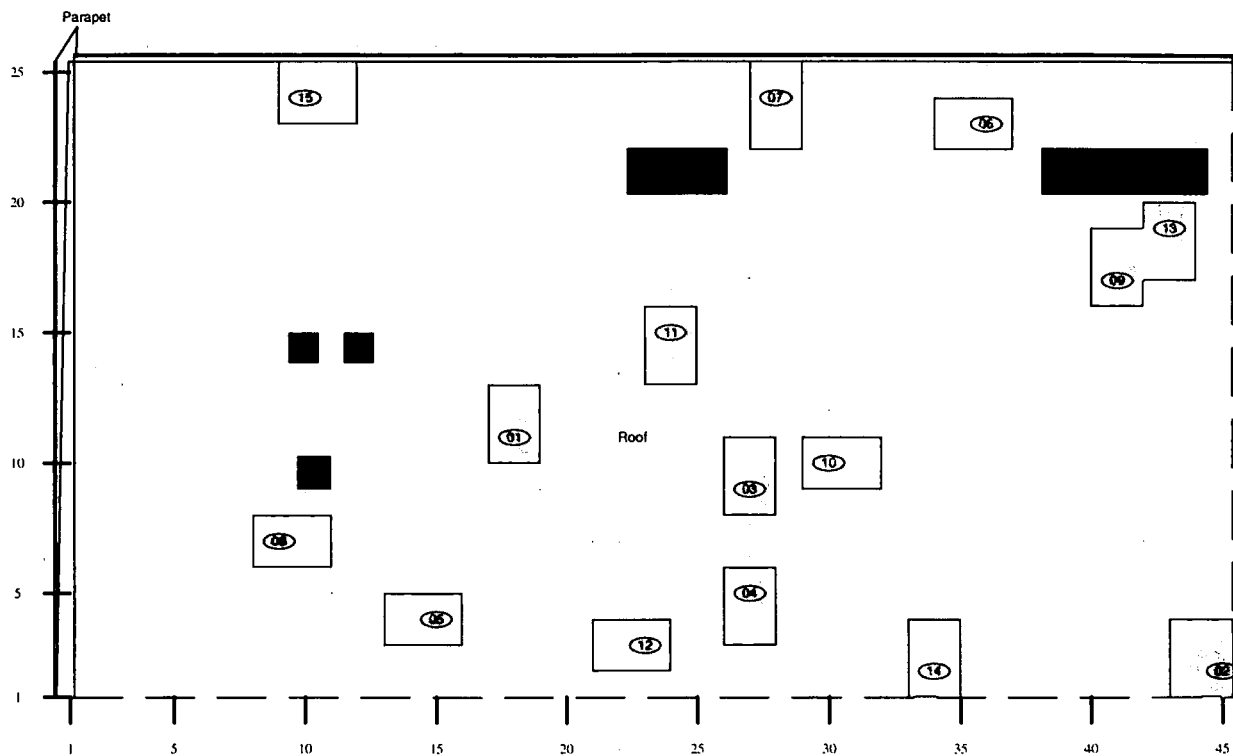
Comments: 90 square meters of this section of the roof was scanned. This is approx. 6% of the total surface area.



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: D      Survey Unit: 707208      Classification: 3  
Building: 707  
Survey Unit Description: Main Building Roof (southwest end)  
Total Floor Area: NA      Total Area: 1086 sq. m      Grid Size: N/A

SURVEY UNIT 707208 - MAP 1 OF 1



324

ATTACHMENT B36

Survey Unit 707209 Survey Data and Maps

Survey Area: D

Survey Unit: 707209

Building: B707

Description: B707 annex roof

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 60.3 dpm/100cm<sup>2</sup>Minimum: 2.7 dpm/100cm<sup>2</sup>Mean: 35.0 dpm/100cm<sup>2</sup>

Standard Deviation: 17.4

QC Maximum: 26.4 dpm/100cm<sup>2</sup>QC Minimum: 20.4 dpm/100cm<sup>2</sup>QC Mean: 23.4 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>W</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 0.9 dpm/100cm<sup>2</sup>Minimum: -1.2 dpm/100cm<sup>2</sup>Mean: -0.4 dpm/100cm<sup>2</sup>

Standard Deviation: 0.6

Transuranic DCGL<sub>W</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707209

Building: B707

Description: B707 annex roof

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	702575	08/15/04	SAC-4	1473	NA	01/29/05	0.333	NA	10.0	NA	R
2	702575	08/15/04	SAC-4	1284	NA	01/29/05	0.333	NA	10.0	NA	R
3	702575	08/15/04	SAC-4	1265	NA	09/15/04	0.333	NA	10.0	NA	R
4	702575	08/15/04	SAC-4	760	NA	10/08/04	0.333	NA	10.0	NA	R
5	702575	08/15/04	SAC-4	1398	NA	09/02/04	0.333	NA	10.0	NA	R
6	711451	08/15/04	Electra	4680	DP-6	08/20/04	0.228	NA	48.0	NA	T
7	513686	08/15/04	Electra	2124	DP-6	11/18/04	0.214	NA	48.0	NA	T
8	702418	08/15/04	Electra	1826	DP-6	09/25/04	0.225	NA	48.0	NA	S
9	712467	08/15/04	Electra	4400	DP-6	12/04/04	0.234	NA	48.0	NA	S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

327

Survey Area: D

Survey Unit: 707209

Building: B707

Description: B707 annex roof

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707209PRP-N001	1	-0.6	N/A	
707209PRP-N002	2	-0.9	N/A	
707209PRP-N003	3	0.3	N/A	
707209PRP-N004	4	0.0	N/A	
707209PRP-N005	5	-0.6	N/A	
707209PRP-N006	1	0.9	N/A	
707209PRP-N007	2	-0.9	N/A	
707209PRP-N008	3	-1.2	N/A	
707209PRP-N009	4	0.0	N/A	
707209PRP-N010	5	-0.6	N/A	
707209PRP-N011	1	-0.6	N/A	
707209PRP-N012	2	0.6	N/A	
707209PRP-N013	3	-1.2	N/A	
707209PRP-N014	4	0.0	N/A	
707209PRP-N015	5	-0.6	N/A	

Comments:

Survey Area: D

Survey Unit: 707209

Building: B707

Description: B707 annex roof

## Random/QC Total Surface Activity Data Sheet

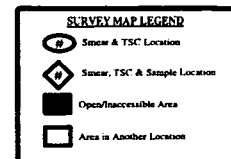
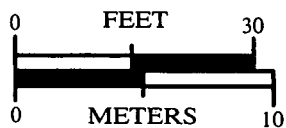
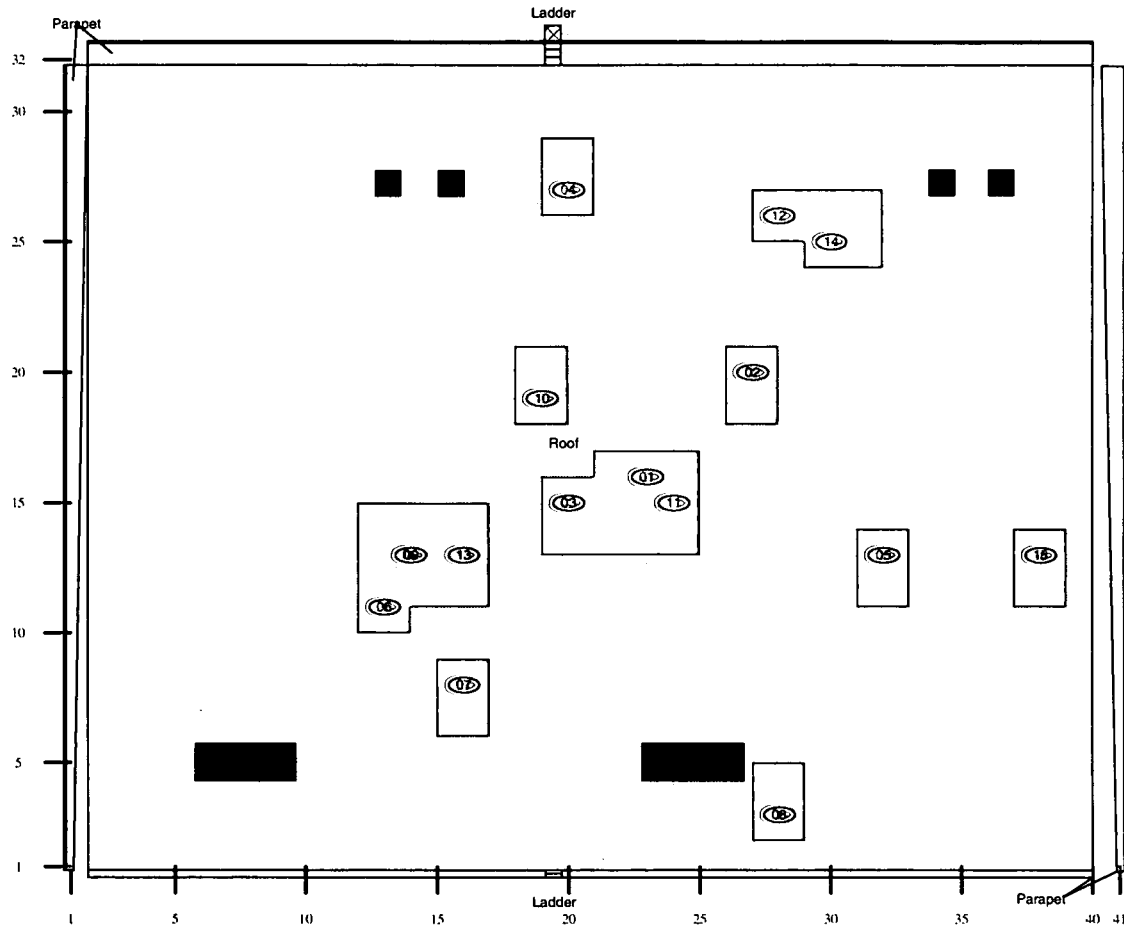
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707209PRP-N001	6	8.9	N/A	
707209PRP-N002	7	60.3	N/A	
707209PRP-N003	6	35.2	N/A	
707209PRP-N004	6	35.2	N/A	
707209PRP-N005	7	44.9	N/A	
707209PRP-N006	7	48.2	N/A	
707209PRP-N007	6	44.0	N/A	
707209QRP-N007	7	20.4	N/A	
707209PRP-N008	6	55.4	N/A	
707209PRP-N009	6	23.4	N/A	
707209PRP-N010	7	41.6	N/A	
707209PRP-N011	7	32.3	N/A	
707209PRP-N012	6	52.7	N/A	
707209PRP-N013	6	11.5	N/A	
707209PRP-N014	6	2.7	N/A	
707209QRP-N014	7	26.4	N/A	
707209PRP-N015	6	29.1	N/A	

Comments: 90 square meters of this section of the roof was scanned. This is approx. 6% of the total surface area.

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707209      Classification: 3  
Building: 707  
Survey Unit Description: Northwest Building Annex Roof  
Total Floor Area: N/A      Total Area: 1255 sq. m      Grid Size: N/A

## **SURVEY UNIT 707209 - MAP 1 OF 1**



ATTACHMENT B37

Survey Unit 707210 Survey Data and Maps



**Survey Area:** D**Survey Unit:** 707210**Building:** 707**Description:** East exterior walls (lower north end)

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15  
Nbr Random Measurements Performed: 15

Nbr Biased Measurements Required: 0  
Nbr Biased Measurements Performed: 0

Nbr QC Required: 2  
Nbr QC Performed: 2

#### Alpha

Maximum: 69.1 dpm/100cm<sup>2</sup>  
Minimum: -35.9 dpm/100cm<sup>2</sup>  
Mean: -5.7 dpm/100cm<sup>2</sup>  
Standard Deviation: 29.3  
QC Maximum: 7.3 dpm/100cm<sup>2</sup>  
QC Minimum: -5.0 dpm/100cm<sup>2</sup>  
QC Mean: 1.1 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15  
Nbr Random Measurements Performed: 15

Nbr Biased Measurements Required: 0  
Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 2.7 dpm/100cm<sup>2</sup>  
Minimum: -0.3 dpm/100cm<sup>2</sup>  
Mean: 1.3 dpm/100cm<sup>2</sup>  
Standard Deviation: 1.5  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0  
Nbr Random Collected: 0

Nbr Biased Required: 0  
Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: D

Survey Unit: 707210

Building: 707

Description: East exterior walls (lower north end)

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	702058	09/26/04	Electra	3980	DP-6	03/21/05	0.219	NA	48.0	NA	T/S
2	701418	09/26/04	Electra	1834	DP-6	03/24/05	0.219	NA	48.0	NA	T/S
3	702058	09/26/04	SAC-4	1468	NA	02/23/05	0.333	NA	NA	NA	R
4	701418	09/26/04	SAC-4	760	NA	02/28/05	0.333	NA	NA	NA	R
5	513185	10/11/04	Electra	3985	DP-6	02/20/05	0.230	NA	48.0	NA	T/I

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707210

Building: 707

Description: East exterior walls (lower north end)

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707210PRP-N001	3	2.7	N/A	
707210PRP-N002	4	-0.3	N/A	
707210PRP-N003	3	2.7	N/A	
707210PRP-N004	4	-0.3	N/A	
707210PRP-N005	3	-0.3	N/A	
707210PRP-N006	4	2.7	N/A	
707210PRP-N007	3	2.7	N/A	
707210PRP-N008	4	-0.3	N/A	
707210PRP-N009	3	2.7	N/A	
707210PRP-N010	4	-0.3	N/A	
707210PRP-N012	3	2.7	N/A	
707210PRP-N013	4	2.7	N/A	
707210PRP-N014	3	-0.3	N/A	
707210PRP-N015	4	2.7	N/A	
707210PRP-N016	3	-0.3	N/A	

Comments:

Survey Area: D

Survey Unit: 707210

Building: 707

Description: East exterior walls (lower north end)

**Random/QC Total Surface Activity Data Sheet**

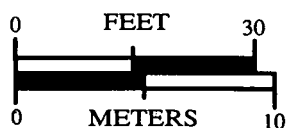
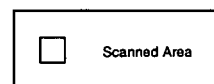
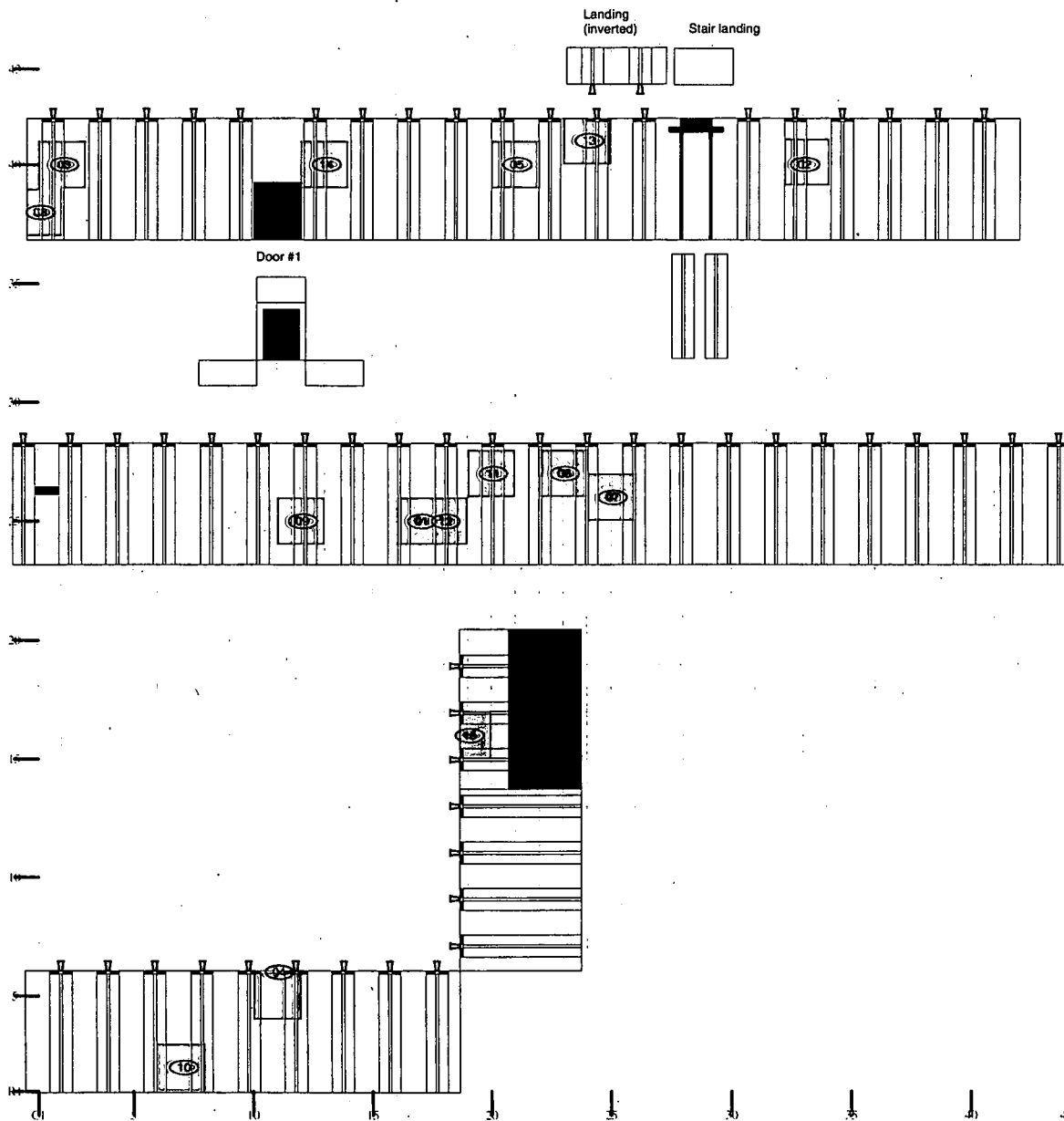
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707210PRP-N001	1	-29.5	N/A	
707210PRP-N002	1	-17.7	N/A	
707210PRP-N003	1	10.2	N/A	
707210QRP-N003	2	7.3	N/A	
707210SRP-N004	5	29.6	N/A	
707210PRP-N005	1	-13.1	N/A	
707210PRP-N006	2	-11.7	N/A	
707210PRP-N007	2	-16.8	N/A	
707210PRP-N008	1	-33.6	N/A	
707210QRP-N008	1	-5.0	N/A	
707210PRP-N009	1	-35.9	N/A	
707210PRP-N010	2	-14.5	N/A	
707210PRP-N011	1	69.1	N/A	
707210PRP-N012	1	-23.6	N/A	
707210PRP-N013	1	-13.6	N/A	
707210PRP-N014	2	-19.5	N/A	
707210PRP-N015	2	34.8	N/A	

Comments: Scanned > 5% of the wall surfaces. All values < 300 dpm/100 cm<sup>2</sup>.

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 771 CLUSTER**

Survey Area: D      Survey Unit: 707210      Classification: 3  
 Building: 707  
 Survey Unit Description: East exterior walls (lower, north end)  
 Total Floor Area: N/A      Total Area: 591 sq. m      Grid Size: N/A

## **SURVEY UNIT 707210 - MAP 1 OF 1**



ATTACHMENT B38

Survey Unit 707211 Survey Data and Maps

Survey Area: D

Survey Unit: 707211

Building: 707

Description: Upper wall east side of main building

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 62.8 dpm/100cm<sup>2</sup>Minimum: -7.4 dpm/100cm<sup>2</sup>Mean: 18.5 dpm/100cm<sup>2</sup>

Standard Deviation: 18.5

QC Maximum: 23.5 dpm/100cm<sup>2</sup>QC Minimum: 14.6 dpm/100cm<sup>2</sup>QC Mean: 19.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 4.2 dpm/100cm<sup>2</sup>Minimum: -0.3 dpm/100cm<sup>2</sup>Mean: 0.9 dpm/100cm<sup>2</sup>

Standard Deviation: 1.6

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707211

Building: 707

Description: Upper wall east side of main building

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	516375	10/11/04	Electra	4173	DP-6	11/04/04	0.218	NA	48.0	NA	T/S
2	508194	10/11/04	Electra	1372	DP-6	01/16/05	0.226	NA	48.0	NA	T/S
3	516375	10/11/04	SAC-4	760	NA	02/28/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation



Survey Area: D

Survey Unit: 707211

Building: 707

Description: Upper wall east side of main building

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707211PRP-N001	3	-0.3	N/A	
707211PRP-N002	3	-0.3	N/A	
707211PRP-N003	3	1.2	N/A	
707211PRP-N004	3	-0.3	N/A	
707211PRP-N005	3	-0.3	N/A	
707211PRP-N006	3	-0.3	N/A	
707211PRP-N007	3	1.2	N/A	
707211PRP-N008	3	1.2	N/A	
707211PRP-N009	3	-0.3	N/A	
707211PRP-N010	3	4.2	N/A	
707211PRP-N011	3	-0.3	N/A	
707211PRP-N012	3	4.2	N/A	
707211PRP-N013	3	-0.3	N/A	
707211PRP-N014	3	2.7	N/A	
707211PRP-N015	3	1.2	N/A	

Comments:

Survey Area: D

Survey Unit: 707211

Building: 707

Description: Upper wall east side of main building

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707211PRP-N001	1	62.8	N/A	
707211QRP-N001	2	14.6	N/A	
707211PRP-N002	1	-4.1	N/A	
707211PRP-N003	1	17.0	N/A	
707211PRP-N004	1	26.1	N/A	
707211PRP-N005	1	-7.4	N/A	
707211PRP-N006	1	14.2	N/A	
707211PRP-N007	1	41.7	N/A	
707211PRP-N008	1	1.8	N/A	
707211PRP-N009	1	26.1	N/A	
707211QRP-N009	2	23.5	N/A	
707211PRP-N010	1	3.7	N/A	
707211PRP-N011	1	14.2	N/A	
707211PRP-N012	1	35.3	N/A	
707211PRP-N013	1	20.2	N/A	
707211PRP-N014	1	5.0	N/A	
707211PRP-N015	1	20.2	N/A	

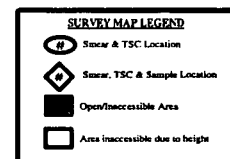
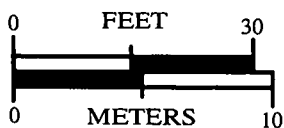
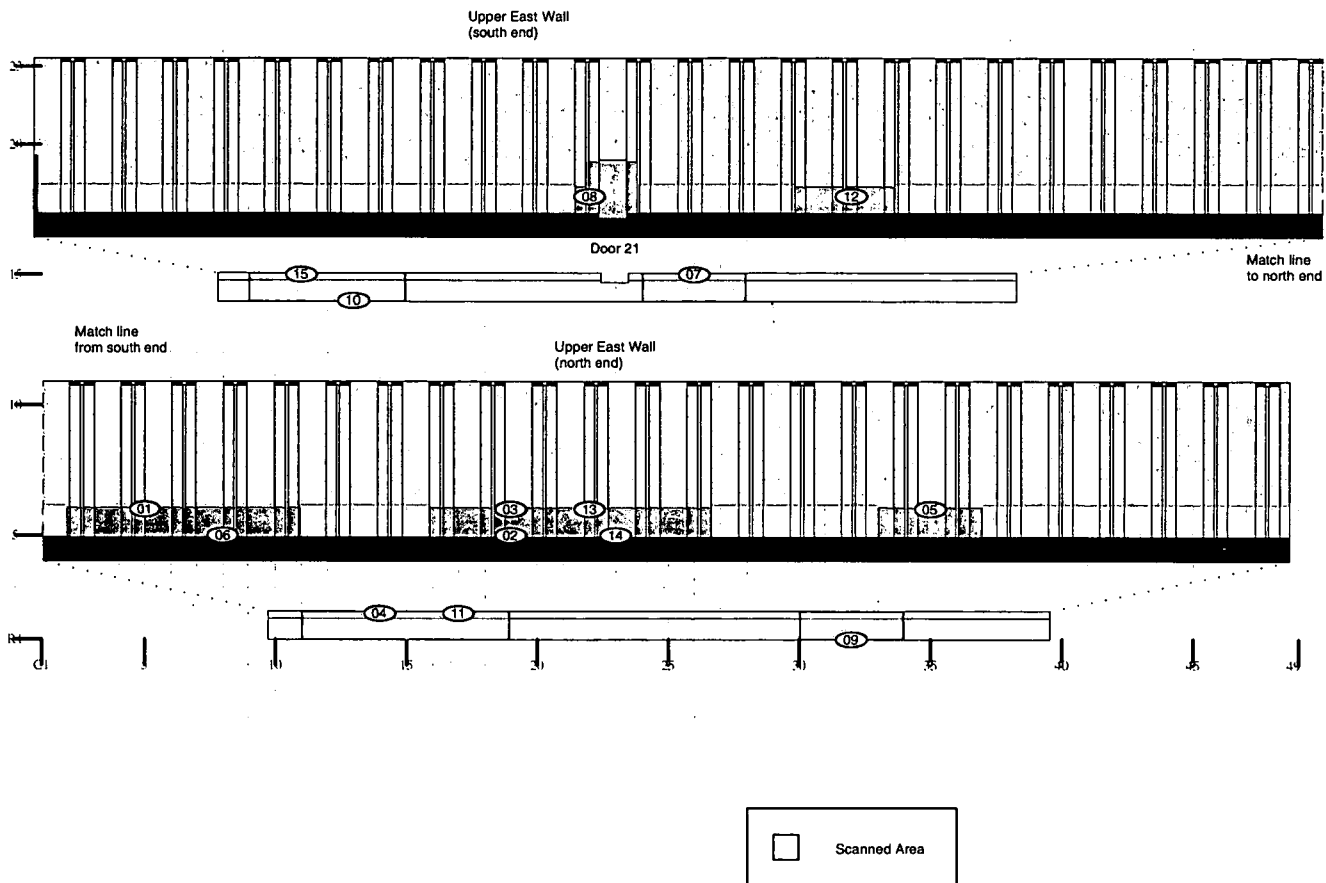
Comments: Scanned 5% of the wall surfaces. All values < 300 dpm/100 cm<sup>2</sup>.

3241

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 771 CLUSTER**

Survey Area: D      Survey Unit: 707211      Classification: 3  
Building: 707  
Survey Unit Description: Exterior Walls (northeast, upper elevation)  
Total Floor Area: NA sq. m      Total Area: 636 sq. m      Grid Size: NA

## **SURVEY UNIT 707211 - MAP 1 OF 1**



ATTACHMENT B39.

Survey Unit 707212 Survey Data and Maps

**Survey Area:** D**Survey Unit:** 707212**Building:** 707**Description:** B707 East exterior wall (lower south end)

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 51.7 dpm/100cm<sup>2</sup>Minimum: 1.3 dpm/100cm<sup>2</sup>Mean: 21.3 dpm/100cm<sup>2</sup>

Standard Deviation: 16.4

QC Maximum: 10.2 dpm/100cm<sup>2</sup>QC Minimum: 5.5 dpm/100cm<sup>2</sup>QC Mean: 7.8 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: -0.9 dpm/100cm<sup>2</sup>Mean: 0.5 dpm/100cm<sup>2</sup>

Standard Deviation: 1.3

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: D

Survey Unit: 7072.12

Building: 707

Description: B707 East exterior wall (lower south end)

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	511798	06/28/04	Electra	3972	DP-6	08/02/04	0.229	NA	48.0	NA	T/S
2	512999	06/28/04	Electra	4174	DP-6	12/01/04	0.216	NA	48.0	NA	T/S
3	512999	06/28/04	SAC-4	1474	NA	11/03/04	0.333	NA	10.0	NA	R
4	509284	06/29/04	Electra	4174	DP-6	12/01/04	0.216	NA	48.0	NA	T/S
5	509284	06/29/04	SAC-4	1474	NA	11/03/04	0.333	NA	10.0	NA	R
6	511798	06/29/04	Electra	3972	DP-6	08/02/04	0.229	NA	48.0	NA	T/S

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707212

Building: 707

Description: B707 East exterior wall (lower south end)

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707212PRP-N001	3	0.0	N/A	
707212PRP-N002	5	-0.9	N/A	
707212PRP-N003	3	0.0	N/A	
707212PRP-N004	3	0.0	N/A	
707212PRP-N005	3	3.0	N/A	
707212PRP-N006	5	0.6	N/A	
707212PRP-N007	3	1.5	N/A	
707212PRP-N008	3	1.5	N/A	
707212PRP-N009	5	-0.9	N/A	
707212PRP-N010	3	0.0	N/A	
707212PRP-N011	3	0.0	N/A	
707212PRP-N012	3	3.0	N/A	
707212PRP-N013	5	-0.9	N/A	
707212PRP-N014	3	0.0	N/A	
707212PRP-N015	3	0.0	N/A	

Comments:

346

Survey Area: D

Survey Unit: 707212

Building: 707

Description: B707 East exterior wall (lower south end)

## Random/QC Total Surface Activity Data Sheet

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707212PRP-N001	1	10.0	N/A	
707212QRP-N002	4	10.2	N/A	
707212PRP-N002	6	16.2	N/A	
707212PRP-N003	1	1.3	N/A	
707212PRP-N004	1	10.0	N/A	
707212PRP-N005	2	14.7	N/A	
707212QRP-N005	4	5.5	N/A	
707212PRP-N006	6	33.6	N/A	
707212PRP-N007	2	51.7	N/A	
707212PRP-N008	1	10.0	N/A	
707212PRP-N009	6	7.4	N/A	
707212PRP-N010	1	1.3	N/A	
707212PRP-N011	1	18.8	N/A	
707212PRP-N012	2	20.7	N/A	
707212PRP-N013	6	45.0	N/A	
707212PRP-N014	2	36.4	N/A	
707212PRP-N015	2	42.5	N/A	

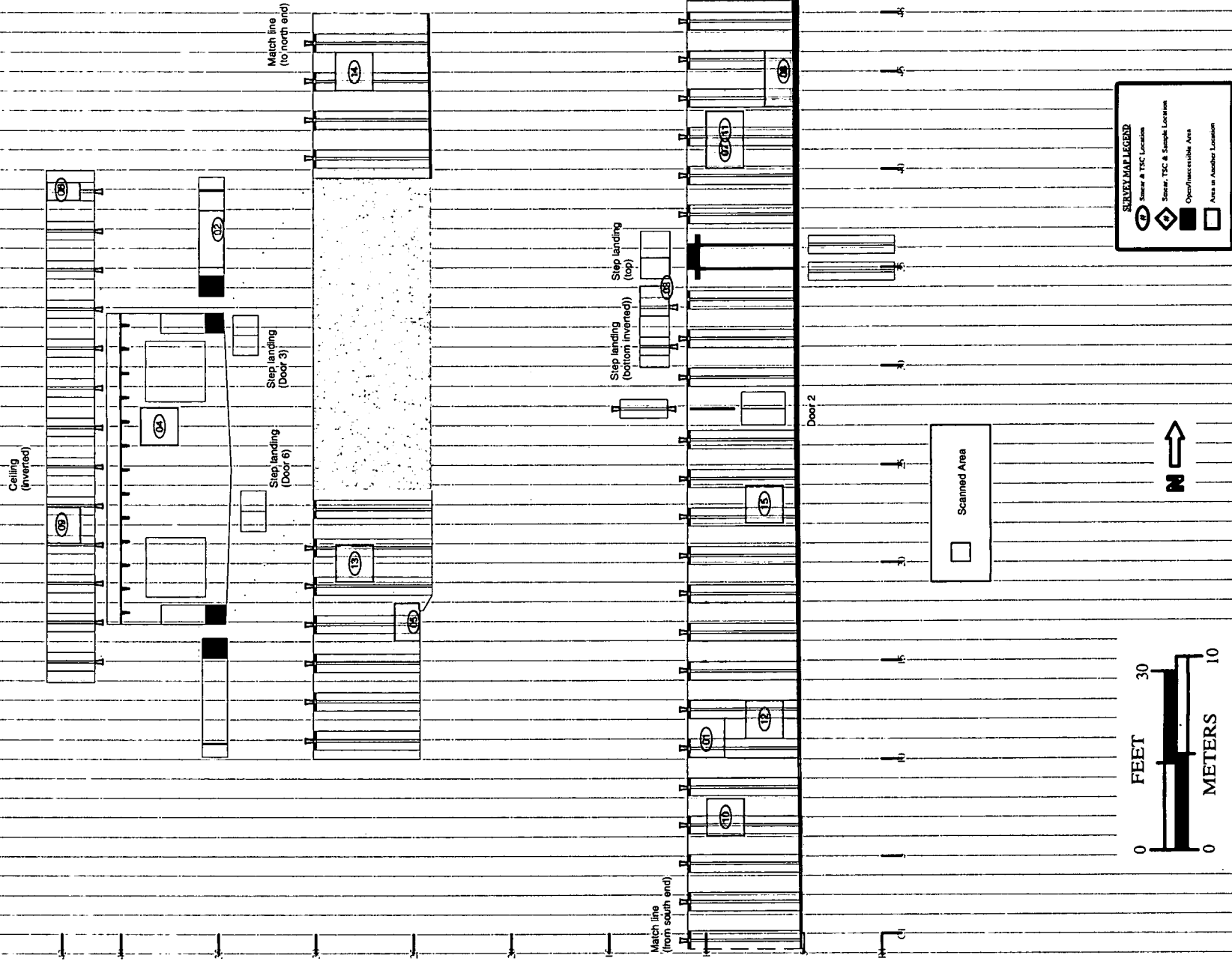
Comments: 30 square meters of this section of the wall was scanned. This is approx. 5% of the total surface area.



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 771 CLUSTER**

Survey Area: D      Survey Unit: 707212      Classification: 3  
 Building: 707  
 Survey Unit Description: East exterior walls (lower, south end)  
 Total Floor Area: NA      Total Area: 593 sq. m      Grid Size: NA

**SURVEY UNIT 707212 - MAP 1 OF 1**



ATTACHMENT B40

Survey Unit 707213 Survey Data and Maps

Survey Area: D

Survey Unit: 707213

Building: 707

Description: Exterior walls (south east, upper elevation)

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 98.1 dpm/100cm<sup>2</sup>Minimum: 14.4 dpm/100cm<sup>2</sup>Mean: 44.4 dpm/100cm<sup>2</sup>

Standard Deviation: 20.8

QC Maximum: 41.5 dpm/100cm<sup>2</sup>QC Minimum: 33.3 dpm/100cm<sup>2</sup>QC Mean: 37.4 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 3.0 dpm/100cm<sup>2</sup>Minimum: 0.0 dpm/100cm<sup>2</sup>Mean: 1.1 dpm/100cm<sup>2</sup>

Standard Deviation: 1.1

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D

Survey Unit: 707213

Building: 707

Description: Exterior walls (south east, upper elevation)

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	513796	10/03/04	Electra	4397	DP-6	03/20/05	0.203	NA	48.0	NA	T/S
2	510757	10/03/04	Electra	1396	DP-6	11/03/04	0.223	NA	48.0	NA	T/S
3	510257	10/03/04	SAC-4	1471	NA	02/28/05	0.333	NA	10.0	NA	R
4	510257	10/03/04	SAC-4	837	NA	12/09/04	0.333	NA	10.0	NA	R
5	510257	10/03/04	SAC-4	1468	NA	02/23/05	0.333	NA	10.0	NA	R
6	510257	10/03/04	SAC-4	760	NA	02/28/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707213

Building: 707

Description: Exterior walls (south east, upper/elevation)

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707213PRP-N001	3	1.5	N/A	
707213PRP-N002	4	0.0	N/A	
707213PRP-N003	5	0.0	N/A	
707213PRP-N004	6	1.5	N/A	
707213PRP-N005	3	1.5	N/A	
707213PRP-N006	4	0.0	N/A	
707213PRP-N007	5	3.0	N/A	
707213PRP-N008	6	0.0	N/A	
707213PRP-N009	3	1.5	N/A	
707213PRP-N010	4	1.5	N/A	
707213PRP-N011	5	0.0	N/A	
707213PRP-N012	6	3.0	N/A	
707213PRP-N013	3	1.5	N/A	
707213PRP-N014	4	0.0	N/A	
707213PRP-N015	5	1.5	N/A	

Comments:

Survey Area: D

Survey Unit: 707213

Building: 707

Description: Exterior walls (south east upper elevation)

**Random/QC Total Surface Activity Data Sheet**

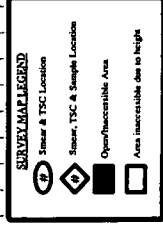
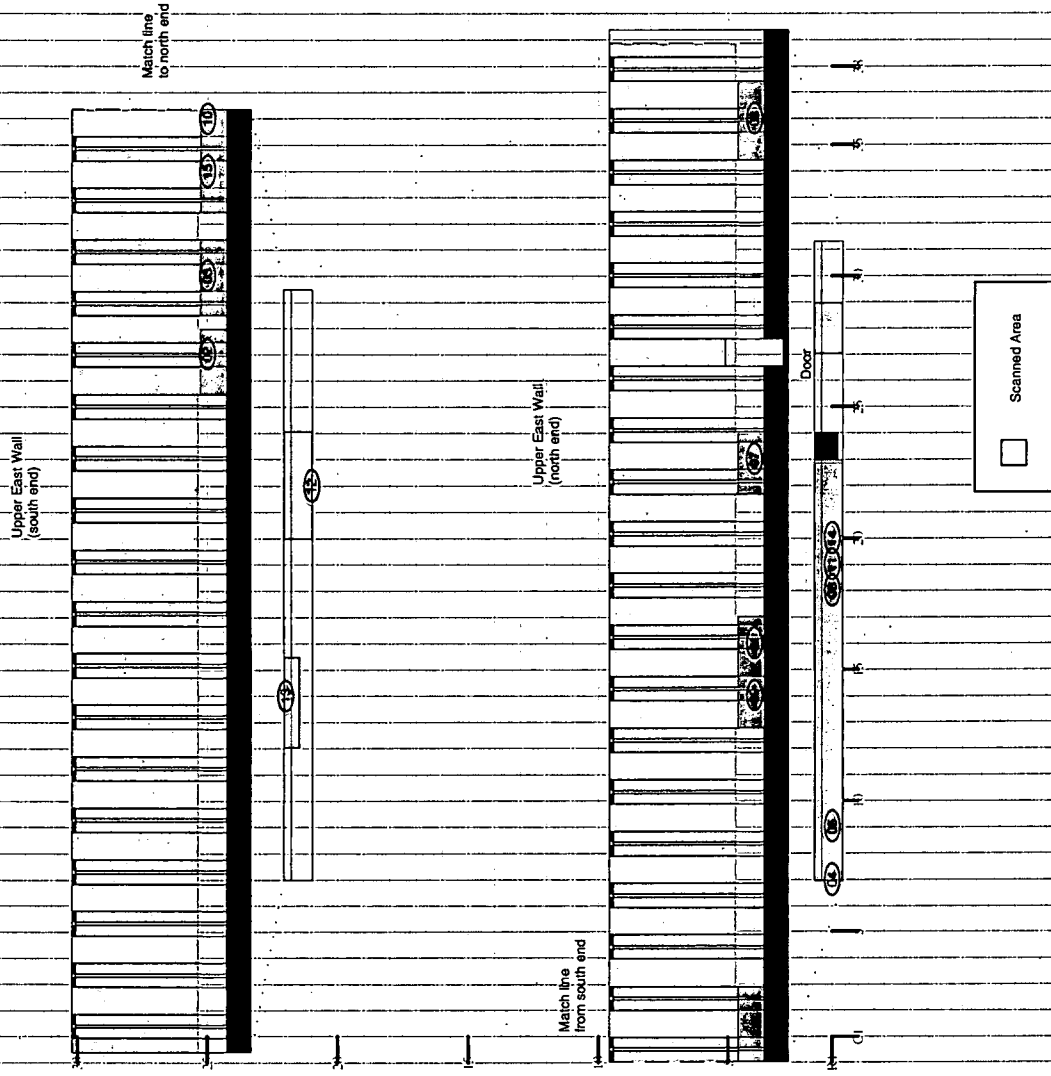
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707213PRP-N001	1	39.0	N/A	
707213QRP-N002	1	33.3	N/A	
707213PRP-N002	2	27.9	N/A	
707213PRP-N003	1	14.4	N/A	
707213QRP-N003	2	41.5	N/A	
707213PRP-N004	2	32.4	N/A	
707213PRP-N005	1	34.1	N/A	
707213PRP-N006	2	54.8	N/A	
707213PRP-N007	1	48.8	N/A	
707213PRP-N008	2	50.3	N/A	
707213PRP-N009	1	63.6	N/A	
707213PRP-N010	2	41.3	N/A	
707213PRP-N011	1	58.7	N/A	
707213PRP-N012	2	23.4	N/A	
707213PRP-N013	1	98.1	N/A	
707213PRP-N014	2	54.8	N/A	
707213PRP-N015	1	24.2	N/A	

Comments: &gt; 10% of the wall surfaces was scanned. All values &lt; 300 dpm/100 cm2.

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 771 CLUSTER

Survey Area: D      Survey Unit: 707213      Classification: 3  
Building: 707  
Survey Unit Description: Exterior Walls (Upper elevation, south east)  
Total Floor Area: NA sq. m      Total Area: 498 sq. m      Grid Size: NA

SURVEY UNIT 707213 - MAP 1 OF 1



ATTACHMENT B41

Survey Unit 707214 Survey Data and Maps



Survey Area: D

Survey Unit: 707214

Building: 707

Description: Exterior walls - south side

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 71.1 dpm/100cm<sup>2</sup>  
Minimum: 9.1 dpm/100cm<sup>2</sup>  
Mean: 48.4 dpm/100cm<sup>2</sup>  
Standard Deviation: 18.3  
QC Maximum: 58.0 dpm/100cm<sup>2</sup>  
QC Minimum: 39.1 dpm/100cm<sup>2</sup>  
QC Mean: 48.6 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 1.2 dpm/100cm<sup>2</sup>  
Minimum: -0.3 dpm/100cm<sup>2</sup>  
Mean: 0.0 dpm/100cm<sup>2</sup>  
Standard Deviation: 0.6  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

<b>Survey Area:</b> D	<b>Survey Unit:</b> 707214	<b>Building:</b> 707
<b>Description:</b> Exterior walls - south side		

### Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	511510	07/01/04	Electra	4398	DP-6	12/17/04	0.216	NA	48.0	NA	T/S
2	514510	07/01/04	Electra	4396	DP-6	09/10/04	0.212	NA	48.0	NA	T/S
3	513185	07/01/04	SAC-4	1474	NA	11/03/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707214

Building: 707

Description: Exterior walls - south side

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707214PRP-N001	3	-0.3	N/A	
707214PRP-N002	3	-0.3	N/A	
707214PRP-N003	3	-0.3	N/A	
707214PRP-N004	3	1.2	N/A	
707214PRP-N005	3	-0.3	N/A	
707214PRP-N006	3	-0.3	N/A	
707214PRP-N007	3	-0.3	N/A	
707214PRP-N008	3	-0.3	N/A	
707214PRP-N009	3	-0.3	N/A	
707214PRP-N010	3	-0.3	N/A	
707214PRP-N011	3	1.2	N/A	
707214PRP-N012	3	-0.3	N/A	
707214PRP-N013	3	-0.3	N/A	
707214PRP-N014	3	1.2	N/A	
707214PRP-N015	3	-0.3	N/A	

Comments:

Survey Area: D

Survey Unit: 707214

Building: 707

Description: Exterior walls - south side

**Random/QC Total Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707214PRP-N001	1	43.4	N/A	
707214PRP-N002	1	61.9	N/A	
707214QRP-N002	2	39.1	N/A	
707214PRP-N003	1	64.7	N/A	
707214PRP-N004	1	64.7	N/A	
707214PRP-N005	1	30.9	N/A	
707214PRP-N006	1	9.1	N/A	
707214PRP-N007	1	52.6	N/A	
707214PRP-N008	1	30.9	N/A	
707214PRP-N009	1	30.9	N/A	
707214PRP-N010	1	49.4	N/A	
707214PRP-N011	1	67.9	N/A	
707214PRP-N012	1	67.9	N/A	
707214PRP-N013	1	46.1	N/A	
707214PRP-N014	1	34.1	N/A	
707214PRP-N015	1	71.1	N/A	
707214QRP-N015	2	58.0	N/A	

Comments: 63 square meters of this section of the wall was scanned. This is approx. 5% of the total surface area.

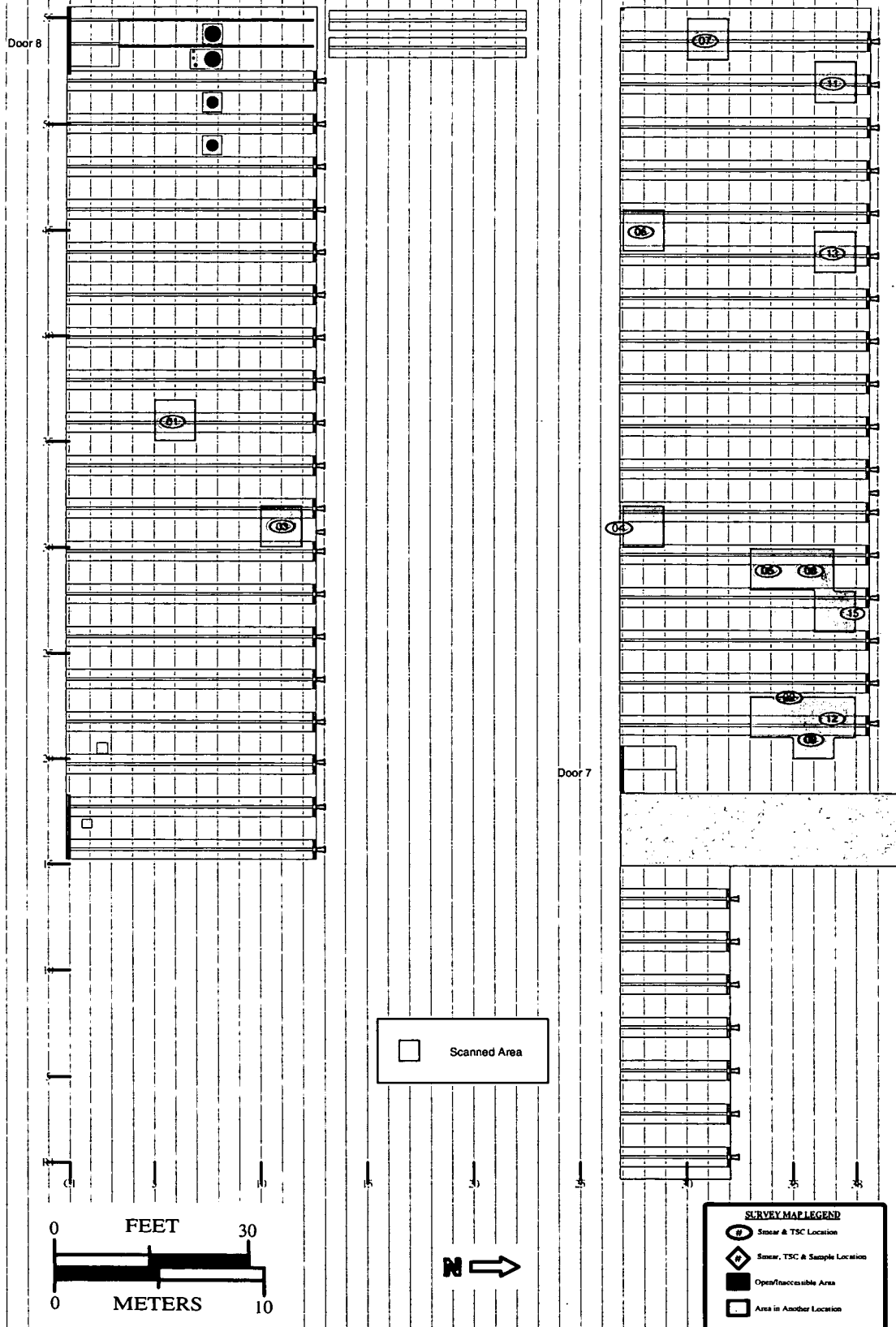
# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707214      Classification: 3  
 Building: 707  
 Survey Unit Description: Main Building exterior (south walls)

Total Floor Area: NA      Total Area: 1253 sq. m      Grid Size: NA

## **SURVEY UNIT 707214 - MAP 1 OF 2**

### **Main Building South Wall**



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707214

Classification: 3

Building: 707

Survey Unit Description: Main Building south walls

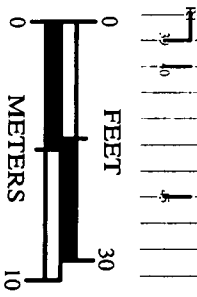
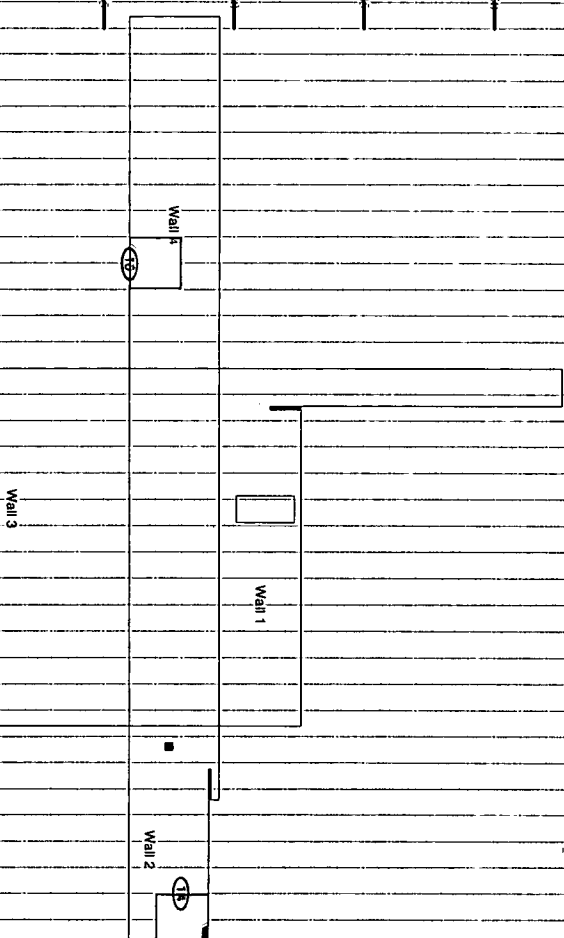
Total Floor Area: NA

Total Area: 1253 sq. m

Grid Size: NA

**SURVEY UNIT 707214 - MAP 2 OF 2**

South Stairwell



**SURVEY MAP LEGEND**

- Show & TSC Location
- Show, TSC & Sample Location
- Open/accessible Area
- Area in Another Location

ATTACHMENT B42

Survey Unit 707215 Survey Data and Maps

Survey Area: D

Survey Unit: 707215

Building: 707

Description: Exterior walls West

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum:	83.9 dpm/100cm <sup>2</sup>
Minimum:	31.6 dpm/100cm <sup>2</sup>
Mean:	58.0 dpm/100cm <sup>2</sup>
Standard Deviation:	15.8
QC Maximum:	96.2 dpm/100cm <sup>2</sup>
QC Minimum:	25.1 dpm/100cm <sup>2</sup>
QC Mean:	60.7 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>W</sub> :	100.0 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>EMC</sub> :	300.0 dpm/100cm <sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum:	1.2 dpm/100cm <sup>2</sup>
Minimum:	-0.3 dpm/100cm <sup>2</sup>
Mean:	0.0 dpm/100cm <sup>2</sup>
Standard Deviation:	0.5
Transuranic DCGL <sub>W</sub> :	20.0 dpm/100cm <sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*



Survey Area: ID	Survey Unit: 707215	Building: 707
Description: Exterior walls West		

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	511510	06/28/04	Electra	4398	DP-6	12/17/04	0.216	NA	48.0	NA	T/S
2	513185	06/28/04	Electra	4396	DP-6	09/10/04	0.215	NA	48.0	NA	T/S
3	514510	06/28/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	511510	06/29/04	Electra	4398	DP-6	12/17/04	0.216	NA	48.0	NA	T/S
5	514510	06/29/04	Electra	4396	DP-6	09/10/04	0.215	NA	48.0	NA	T/S
6	513185	06/29/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707215

Building: 707

Description: Exterior walls - West

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707215PRP-N001	6	0.0	N/A	
707215PRP-N002	3	1.2	N/A	
707215PRP-N003	3	-0.3	N/A	
707215PRP-N004	6	0.0	N/A	
707215PRP-N005	6	0.0	N/A	
707215PRP-N006	3	-0.3	N/A	
707215PRP-N007	3	-0.3	N/A	
707215PRP-N008	3	-0.3	N/A	
707215PRP-N009	3	1.2	N/A	
707215PRP-N010	3	-0.3	N/A	
707215PRP-N011	3	-0.3	N/A	
707215PRP-N012	3	-0.3	N/A	
707215PRP-N013	3	-0.3	N/A	
707215PRP-N014	6	0.0	N/A	
707215PRP-N015	6	0.0	N/A	

Comments:

Survey Area: D

Survey Unit: 707215

Building: 707

Description: Exterior walls - West

## Random/QC Total Surface Activity Data Sheet

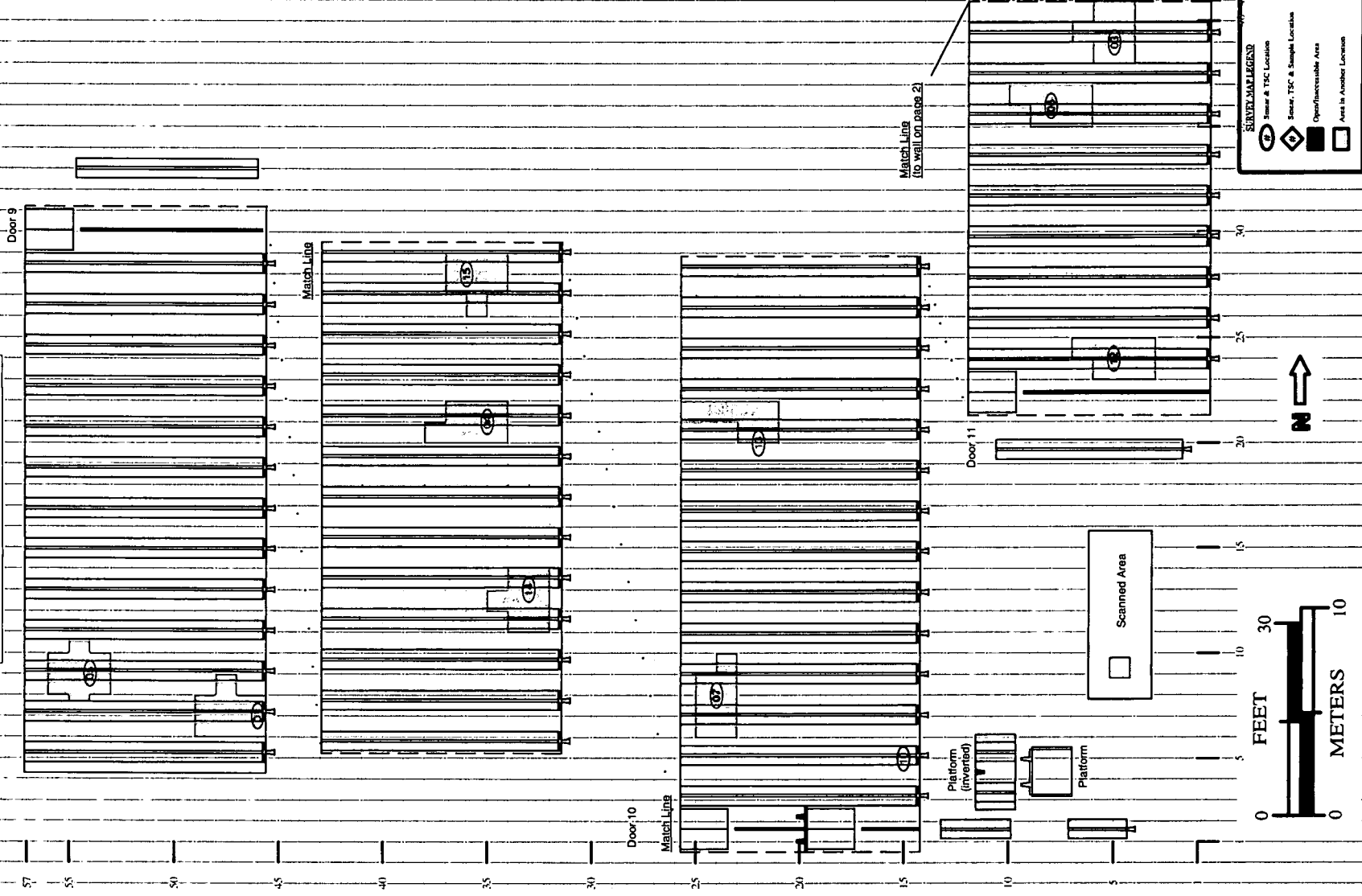
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707215PRP-N001	4	83.9	N/A	
707215PRP-N002	1	40.9	N/A	
707215PRP-N003	1	80.7	N/A	
707215PRP-N004	4	74.7	N/A	
707215PRP-N005	4	43.6	N/A	
707215PRP-N006	1	40.9	N/A	
707215PRP-N007	1	62.2	N/A	
707215PRP-N008	1	43.6	N/A	
707215PRP-N009	1	59.4	N/A	
707215PRP-N010	1	62.2	N/A	
707215QRP-N010	2	96.2	N/A	
707215PRP-N011	1	50.1	N/A	
707215PRP-N012	1	68.6	N/A	
707215PRP-N013	1	68.6	N/A	
707215PRP-N014	4	31.6	N/A	
707215PRP-N015	4	59.4	N/A	
707215QRP-N015	5	25.1	N/A	

Comments: 94 square meters of this section of the wall was scanned. This is approx. 5% of the total surface area.

# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: D      Survey Unit: 707215      Classification: 3  
 Building: 707  
 Survey Unit Description: 707 Main Building (west wall)  
 Total Floor Area: xxx sq. m      Total Area: xxx sq. m      Grid Size: N/A

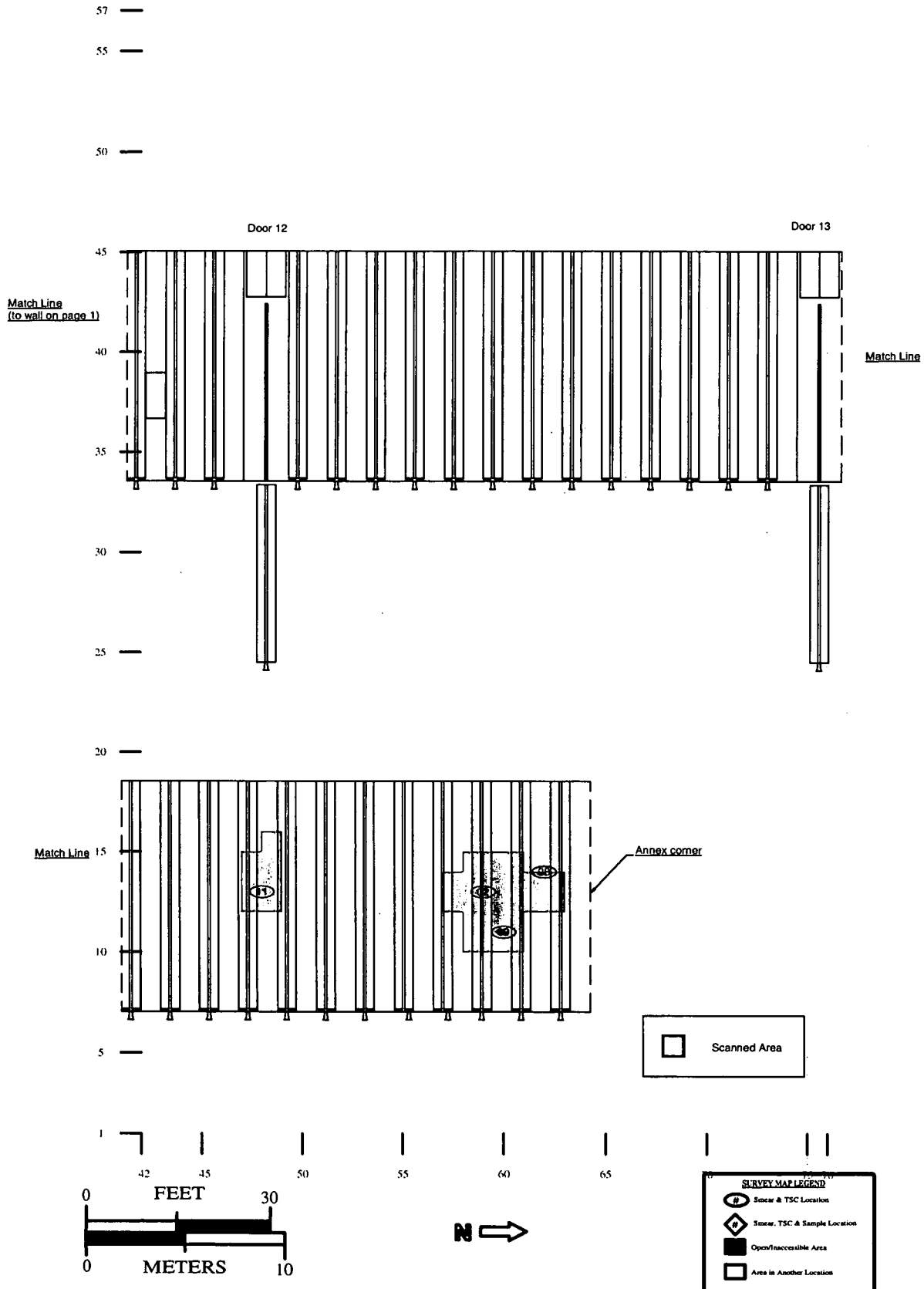
## SURVEY UNIT 707215 - MAP 1 OF 2



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: D      Survey Unit: 707215      Classification: 3  
Building: 707  
Survey Unit Description: 707 Main Building (west wall)  
Total Floor Area: NA      Total Area: 1883 sq. m      Grid Size: NA

## SURVEY UNIT 707215 - MAP 2 OF 2



ATTACHMENT B43

Survey Unit 707216 Survey Data and Maps

Survey Area: D

Survey Unit: 707216

Building: 707

Description: Annex exterior walls

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 77.5 dpm/100cm<sup>2</sup>Minimum: 9.4 dpm/100cm<sup>2</sup>Mean: 38.4 dpm/100cm<sup>2</sup>

Standard Deviation: 19.2

QC Maximum: 42.4 dpm/100cm<sup>2</sup>QC Minimum: 33.0 dpm/100cm<sup>2</sup>QC Mean: 37.7 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 7.8 dpm/100cm<sup>2</sup>Minimum: -1.2 dpm/100cm<sup>2</sup>Mean: 0.3 dpm/100cm<sup>2</sup>

Standard Deviation: 2.2

Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.

Survey Area: D	Survey Unit: 707216	Building: 707
Description: Annex exterior walls		

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	511510	07/12/04	Electra	4174	DP-6	12/01/04	0.216	NA	48.0	NA	T/S
2	514510	07/12/04	Electra	4396	DP-6	09/10/04	0.212	NA	48.0	NA	T/S
3	513185	07/12/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
4	511510	07/13/04	Electra	4174	DP-6	12/01/04	0.216	NA	48.0	NA	T/S
5	514510	07/13/04	Electra	4396	DP-6	09/10/04	0.212	NA	48.0	NA	T/S
6	513185	07/13/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation



Survey Area: D

Survey Unit: 707216

Building: 707

Description: Annex exterior walls

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707216PRP-N001	3	0.3	N/A	
707216PRP-N002	6	-0.6	N/A	
707216PRP-N003	3	1.8	N/A	
707216PRP-N004	3	7.8	N/A	
707216PRP-N005	3	-1.2	N/A	
707216PRP-N006	6	-0.6	N/A	
707216PRP-N007	6	0.9	N/A	
707216PRP-N008	3	0.3	N/A	
707216PRP-N009	6	-0.6	N/A	
707216PRP-N010	3	-1.2	N/A	
707216PRP-N011	3	0.3	N/A	
707216PRP-N012	6	-0.6	N/A	
707216PRP-N013	6	-0.6	N/A	
707216PRP-N014	3	-1.2	N/A	
707216PRP-N015	6	-0.6	N/A	

Comments:

Survey Area: ID

Survey Unit: 707246

Building: 707

Description: Annex exterior walls

## Random/QC Total Surface Activity Data Sheet

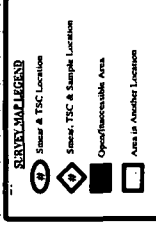
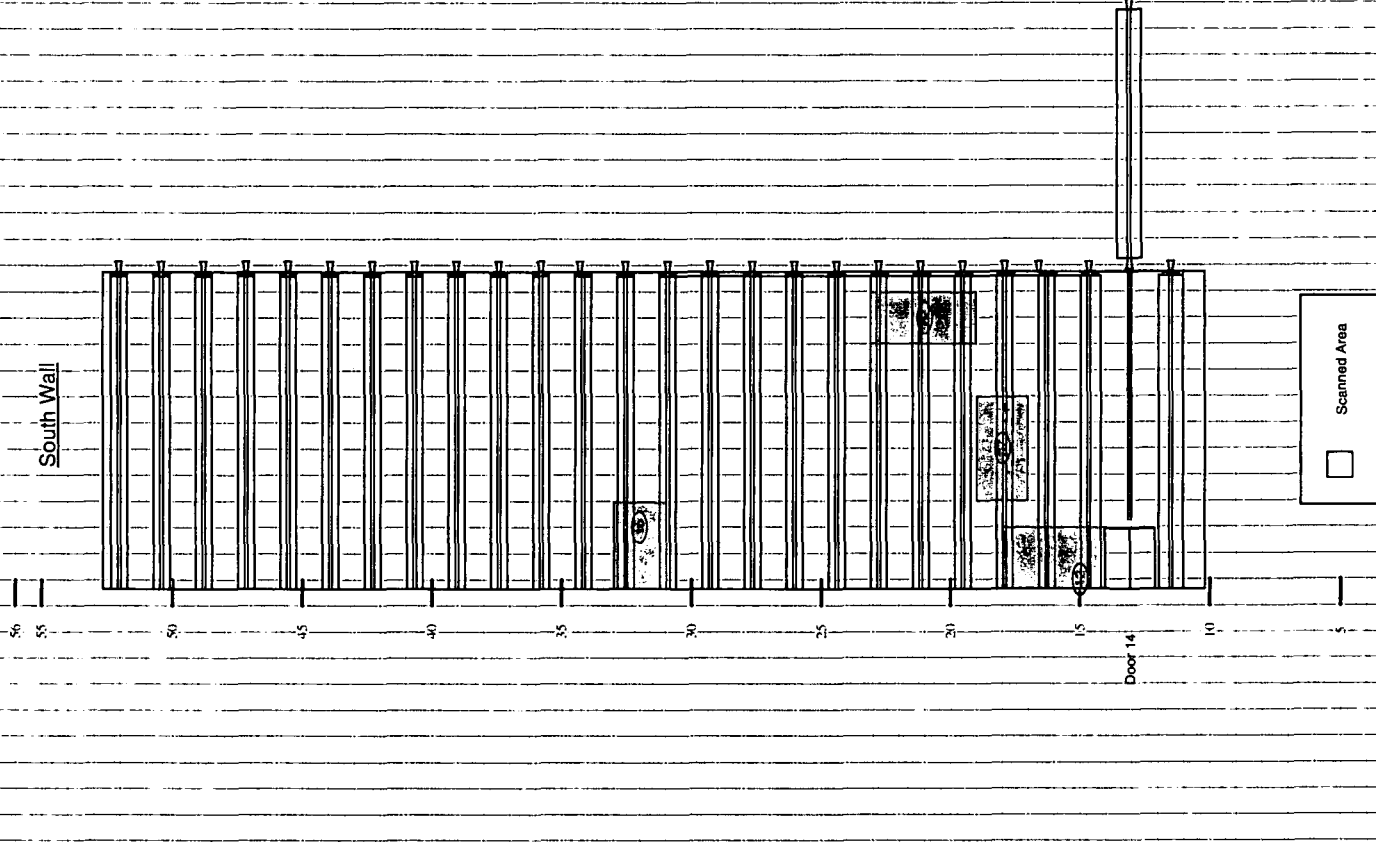
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707216PRP-N001	1	49.7	N/A	
707216PRP-N002	4	34.4	N/A	
707216PRP-N003	1	77.5	N/A	
707216PRP-N004	1	37.2	N/A	
707216PRP-N005	1	59.0	N/A	
707216PRP-N006	4	43.7	N/A	
707216PRP-N007	4	15.9	N/A	
707216PRP-N008	1	9.4	N/A	
707216PRP-N009	4	25.2	N/A	
707216QRP-N009	5	42.4	N/A	
707216PRP-N010	1	18.7	N/A	
707216QRP-N010	2	33.0	N/A	
707216PRP-N011	1	62.2	N/A	
707216PRP-N012	4	18.7	N/A	
707216PRP-N013	4	49.7	N/A	
707216PRP-N014	1	40.5	N/A	
707216PRP-N015	4	34.4	N/A	

Comments: >5% of the accessible surfaces were scanned. All results <300 dpm/100 cm<sup>2</sup>.

**RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707216      Classification: 3  
Building: 707  
Survey Unit Description: 707 Annex exterior walls  
Total Floor Area: NA      Total Area: 2275 sq. m      Grid Size: NA

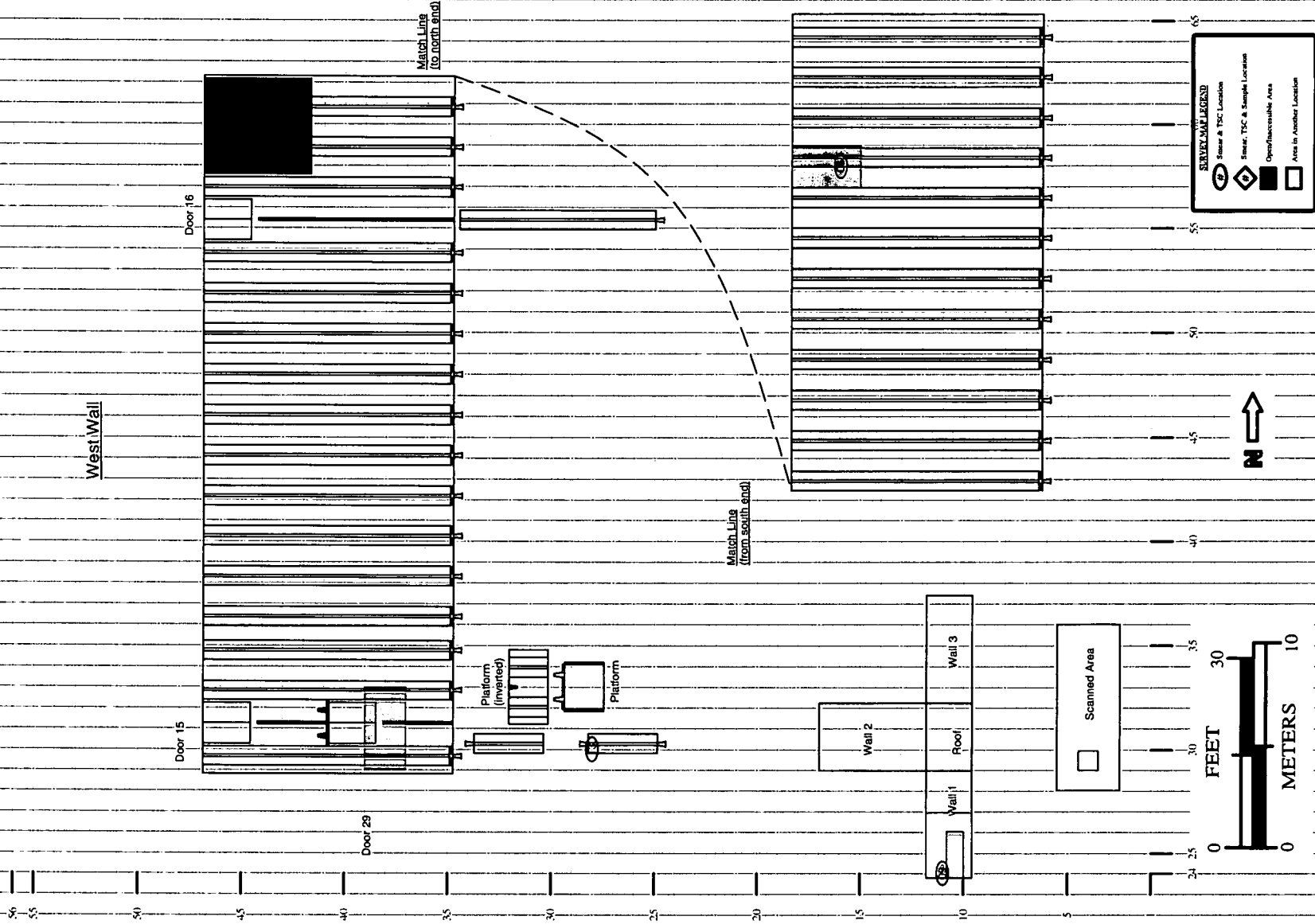
SURVEY UNIT 707216 - MAP 1 OF 4



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707216      Classification: 3  
 Building: 707  
 Survey Unit Description: 707 Annex exterior walls  
 Total Floor Area: NA      Total Area: 2275 sq. m      Grid Size: NA

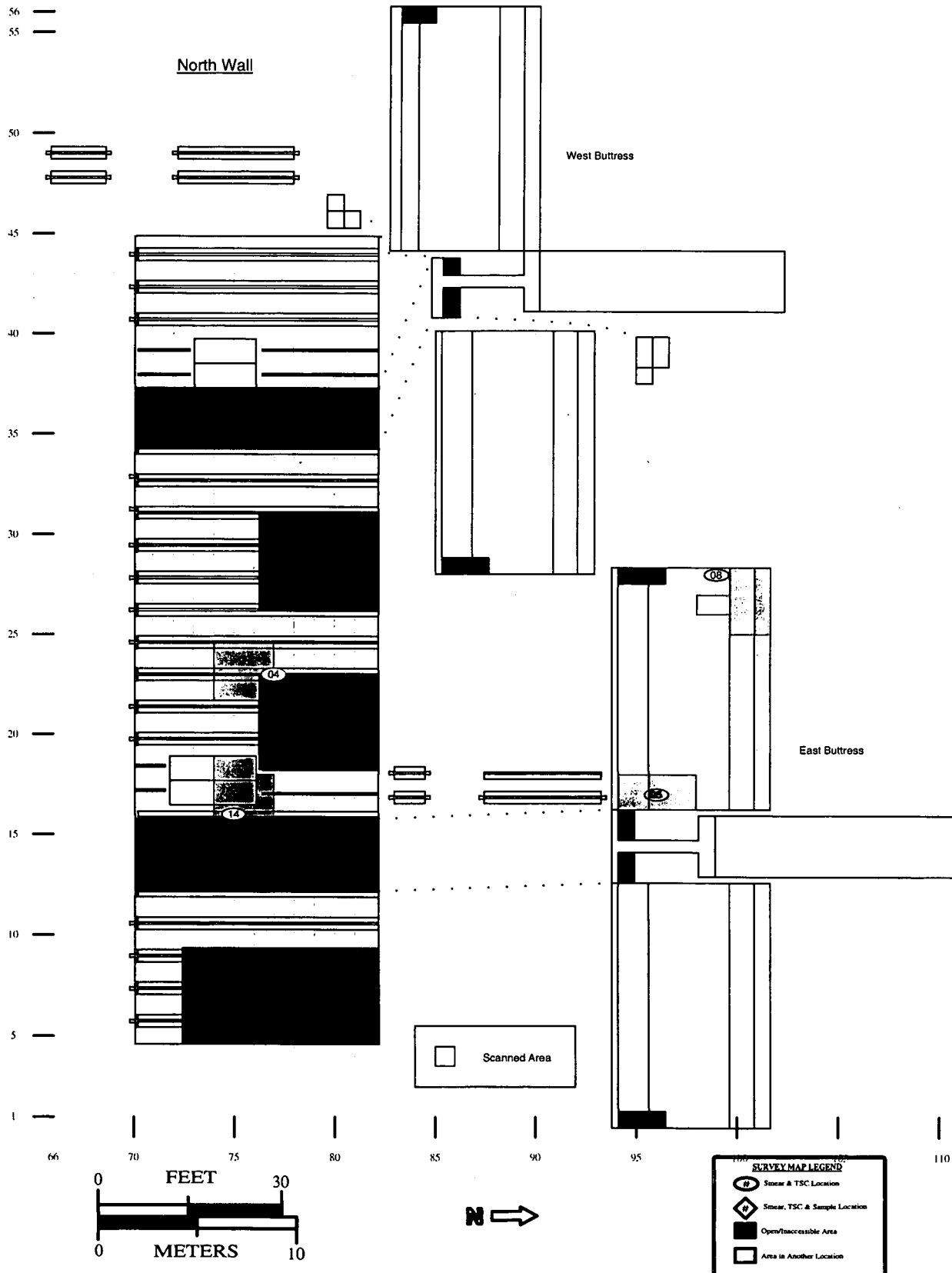
**SURVEY UNIT 707216 - MAP 2 OF 4**



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 771 CLUSTER**

Survey Area: D      Survey Unit: 707216      Classification: 3  
 Building: 707  
 Survey Unit Description: 707 Annex exterior walls  
 Total Floor Area: NA      Total Area: 2275 sq. m      Grid Size: NA

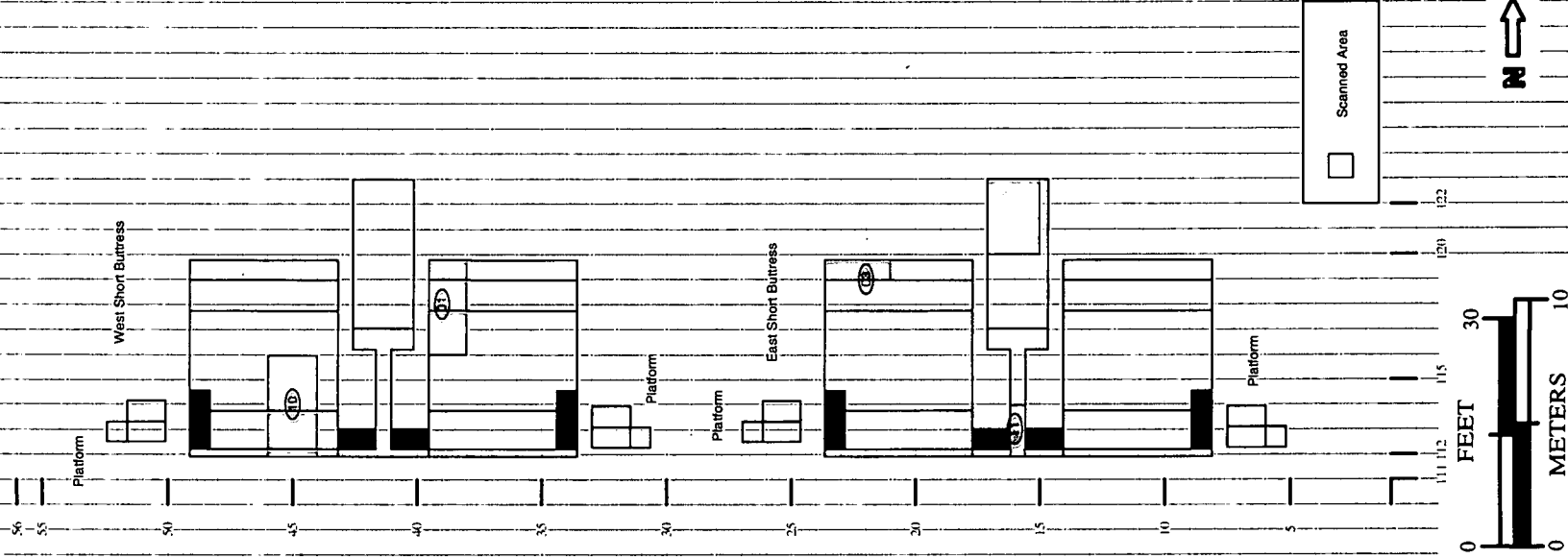
**SURVEY UNIT 707216 - MAP 3 OF 4**



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: D      Survey Unit: 7072016      Classification: 3  
 Building: 707  
 Survey Unit Description: 707 Annex exterior walls  
 Total Floor Area: NA      Total Area: 2275 sq. m      Grid Size: NA

SURVEY UNIT 707216 - MAP 4 OF 4



ATTACHMENT B44

Survey Unit 707217 Survey Data and Maps

Survey Area: D

Survey Unit: 707217

Building: 707

Description: North exterior walls

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum:	90.8 dpm/100cm <sup>2</sup>
Minimum:	0.4 dpm/100cm <sup>2</sup>
Mean:	19.8 dpm/100cm <sup>2</sup>
Standard Deviation:	21.5
QC Maximum:	72.2 dpm/100cm <sup>2</sup>
QC Minimum:	60.3 dpm/100cm <sup>2</sup>
QC Mean:	66.2 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>w</sub> :	100.0 dpm/100cm <sup>2</sup>
Transuranic DCGL <sub>EMC</sub> :	300.0 dpm/100cm <sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum:	3.3 dpm/100cm <sup>2</sup>
Minimum:	-1.2 dpm/100cm <sup>2</sup>
Mean:	0.4 dpm/100cm <sup>2</sup>
Standard Deviation:	1.4
Transuranic DCGL <sub>w</sub> :	20.0 dpm/100cm <sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*



Survey Area: D

Survey Unit: 707217

Building: 707

Description: North exterior walls

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	512999	07/12/04	Electra	3972	DP-6	08/02/04	0.229	NA	48.0	NA	T/S
2	511798	07/12/04	Electra	1503	DP-6	07/16/04	0.219	NA	48.0	NA	Q/S
3	512999	07/12/04	SAC-4	1469	NA	11/27/04	0.333	NA	10.0	NA	R
4	511798	07/12/04	SAC-4	957	NA	11/05/04	0.333	NA	10.0	NA	R
5	511510	10/18/04	Electra	2383	DP-6	12/30/04	0.220	NA	48.0	48.0	I

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707217

Building: 707

Description: North exterior walls

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707217PRP-N001	4	0.3	N/A	
707217PRP-N002	4	-1.2	N/A	
707217PRP-N003	4	-1.2	N/A	
707217PRP-N004	4	-1.2	N/A	
707217PRP-N005	4	0.3	N/A	
707217PRP-N006	4	-1.2	N/A	
707217PRP-N007	4	0.3	N/A	
707217PRP-N008	4	3.3	N/A	
707217PRP-N009	3	2.1	N/A	
707217PRP-N010	3	2.1	N/A	
707217PRP-N011	3	0.6	N/A	
707217PRP-N012	3	-0.9	N/A	
707217PRP-N013	3	0.6	N/A	
707217PRP-N014	3	0.6	N/A	
707217PRP-N015	3	2.1	N/A	

Comments:

Survey Area: ID

Survey Unit: 707217

Building: 707

Description: North exterior walls

**Random/QC Total Surface Activity Data Sheet**

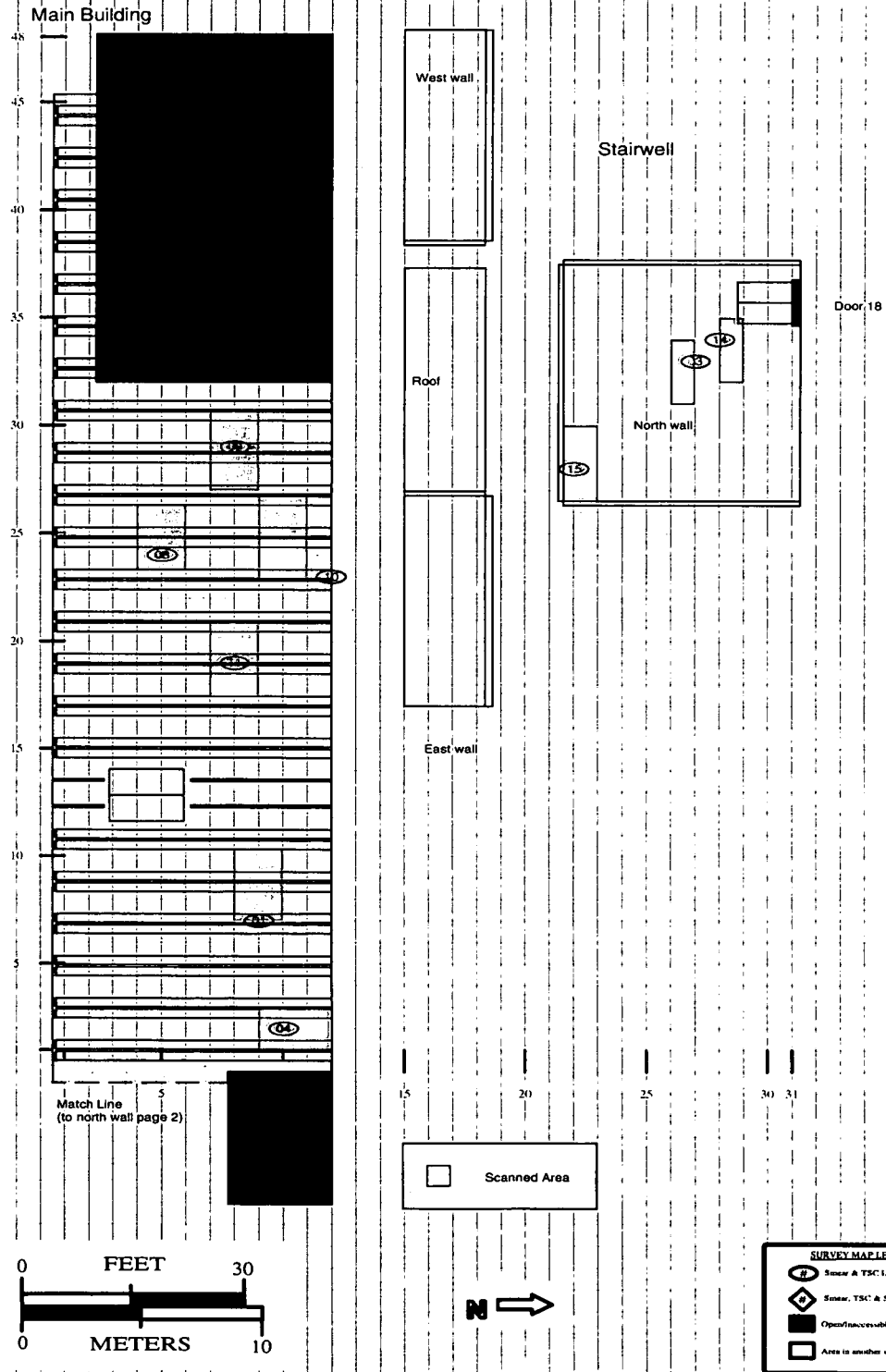
Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707217PRP-N001	1	14.8	N/A	
707217PRP-N002	1	12.2	N/A	
707217PRP-N003	1	0.4	N/A	
707217PRP-N004	1	90.8	N/A	
707217QRP-N004	2	72.2	N/A	
707217PRP-N005	1	26.6	N/A	
707217PRP-N006	1	23.5	N/A	
707217PRP-N007	1	12.2	N/A	
707217PRP-N008	1	9.1	N/A	
707217PRP-N009	1	12.2	N/A	
707217PRP-N010	1	12.2	N/A	
707217PRP-N011	1	35.3	N/A	
707217PRP-N012	1	3.4	N/A	
707217QRP-N013	2	60.3	N/A	
707217SRP-N013	5	21.4	N/A	
707217PRP-N014	1	9.1	N/A	
707217PRP-N015	1	14.8	N/A	

Comments: 46 square meters of this section of the wall was scanned. This is approx. 5% of the total surface area.

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707217      Classification: 3  
 Building: 707  
 Survey Unit Description: Main building north exterior walls  
 Total Floor Area: NA      Total Area: 914 sq. m      Grid Size: NA

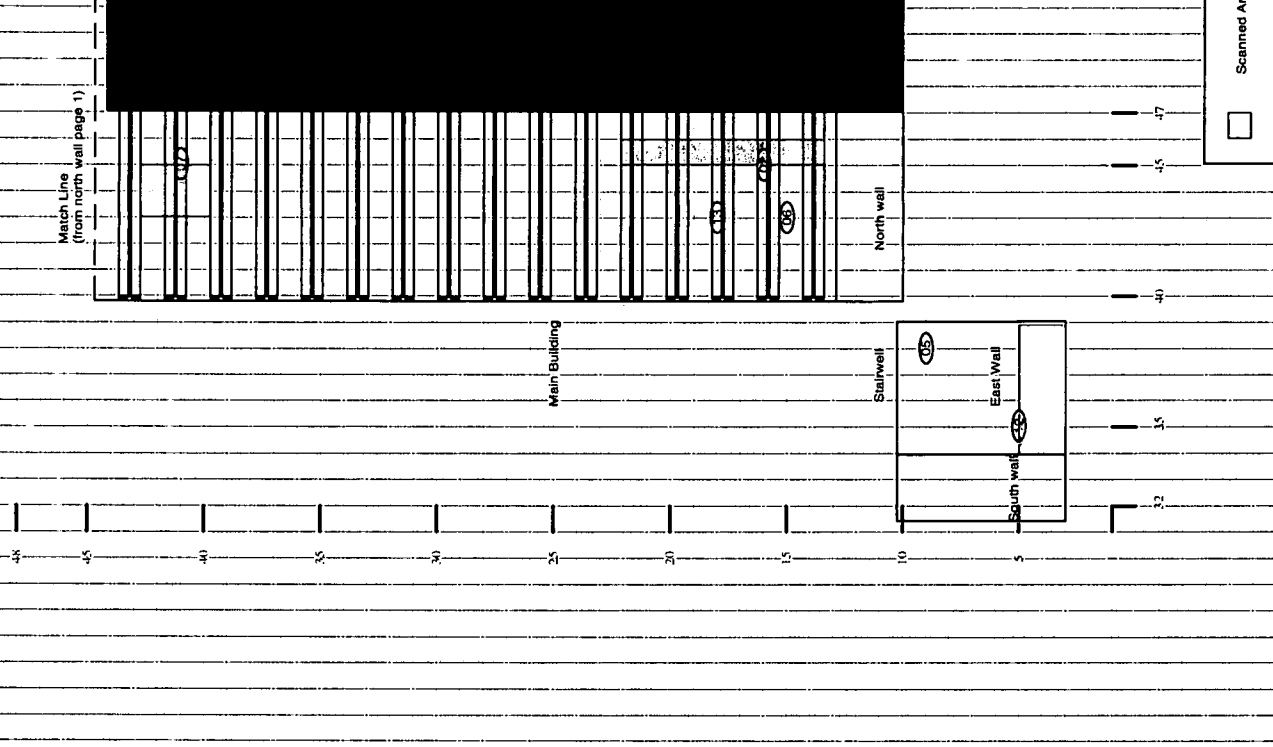
**SURVEY UNIT 707217 - MAP 1 OF 2**



# RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER

Survey Area: D      Survey Unit: 7072017      Classification: 3  
 Building: 707  
 Survey Unit Description: Main building north exterior walls  
 Total Floor Area: NA      Total Area: 914 sq. m      Grid Size: NA

SURVEY UNIT 707217 - MAP 2 OF 2



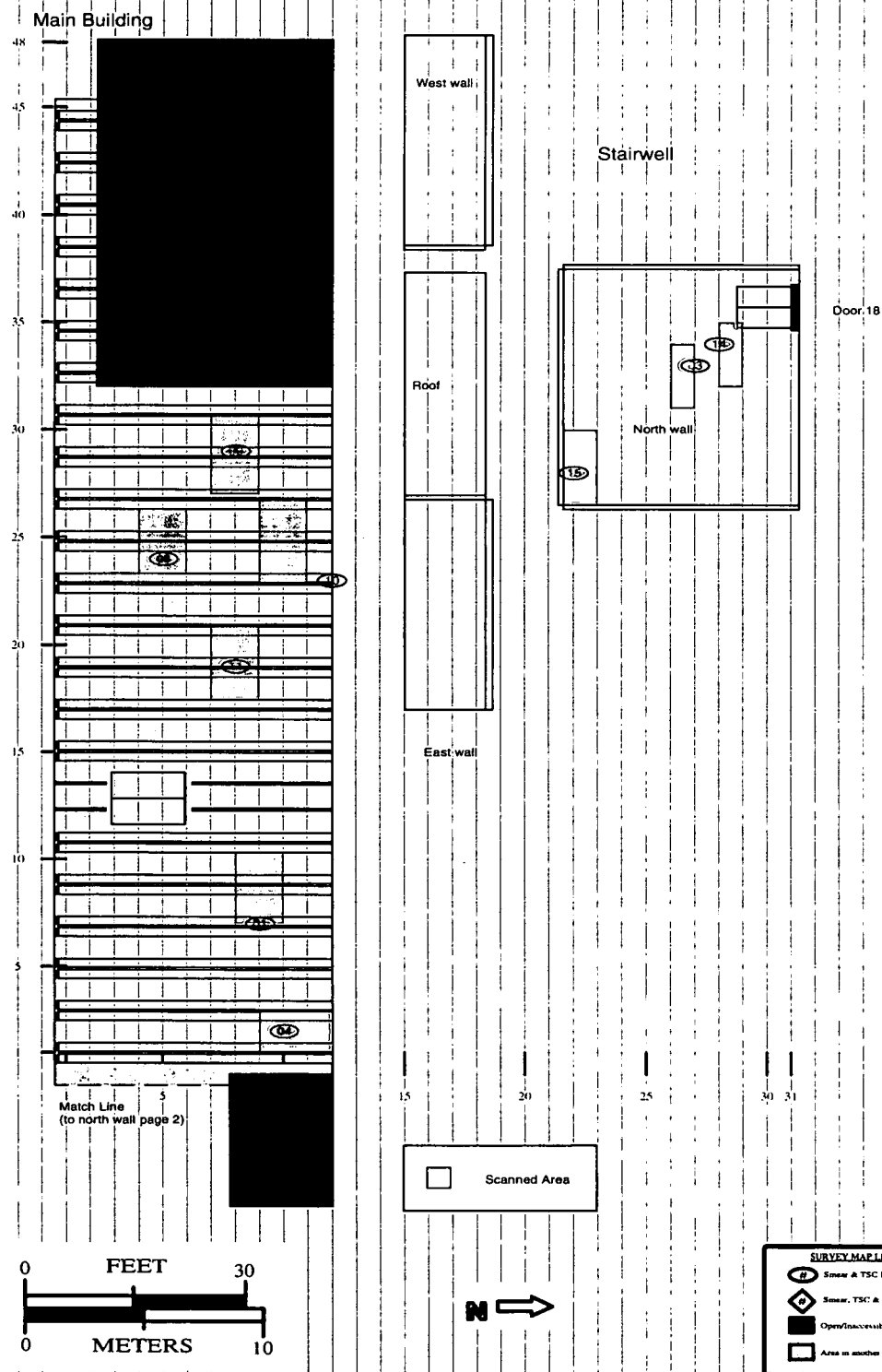
**SURVEY MAP LEGEND**

- Sensor & TSC Location
- Sensor, TSC & Sample Location
- Open/Inaccessible Area
- Area in another survey unit

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 707217      Classification: 3  
 Building: 707  
 Survey Unit Description: Main building north exterior walls  
 Total Floor Area: NA      Total Area: 914 sq. m      Grid Size: NA

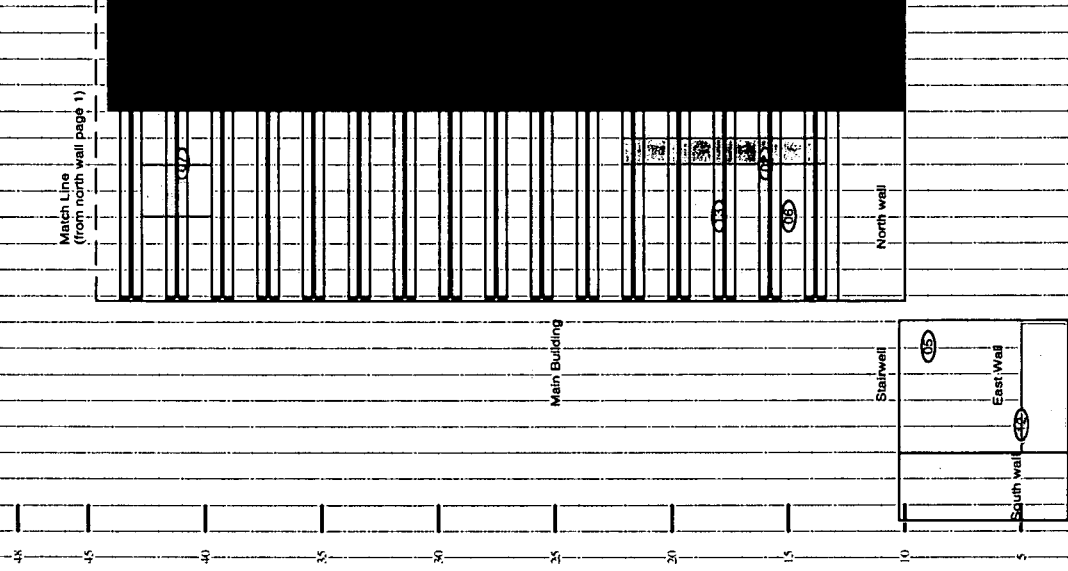
**SURVEY UNIT 707217 - MAP 1 OF 2**



# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D      Survey Unit: 7072017      Classification: 3  
 Building: 707  
 Survey Unit Description: Main building north exterior walls  
 Total Floor Area: NA      Total Area: 914 sq. m      Grid Size: NA

**SURVEY UNIT 707217 - MAP 2 OF 3**



45 47  
 41  
 35  
 32

Scanned Area



**SURVEY MAP LEGEND**

- Stat wall TSC Location
- Stat wall TSC & Sample Location
- Open/Inaccessible Area
- Area in another survey unit

ATTACHMENT B45

Survey Unit 707218 Survey Data and Maps



Survey Area: D

Survey Unit: 707218

Building: 707

Description: Main Building Exterior - Vault walls

## Rocky Flats Environmental Technology Site Final Radiological Survey Summary Results

### Total Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr QC Required: 2

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

Nbr QC Performed: 2

#### Alpha

Maximum: 75.0 dpm/100cm<sup>2</sup>  
Minimum: 11.2 dpm/100cm<sup>2</sup>  
Mean: 40.2 dpm/100cm<sup>2</sup>  
Standard Deviation: 15.3  
QC Maximum: 67.2 dpm/100cm<sup>2</sup>  
QC Minimum: 48.6 dpm/100cm<sup>2</sup>  
QC Mean: 57.9 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>w</sub>: 100.0 dpm/100cm<sup>2</sup>  
Transuranic DCGL<sub>EMC</sub>: 300.0 dpm/100cm<sup>2</sup>

### Removable Surface Activity Measurements

Nbr Random Measurements Required: 15

Nbr Biased Measurements Required: 0

Nbr Random Measurements Performed: 15

Nbr Biased Measurements Performed: 0

#### Alpha

Maximum: 2.7 dpm/100cm<sup>2</sup>  
Minimum: -0.3 dpm/100cm<sup>2</sup>  
Mean: 0.3 dpm/100cm<sup>2</sup>  
Standard Deviation: 0.9  
Transuranic DCGL<sub>w</sub>: 20.0 dpm/100cm<sup>2</sup>

### Media Sample Results

Nbr Random Required: 0

Nbr Biased Required: 0

Nbr Random Collected: 0

Nbr Biased Collected: 0

*Conclusion - A comparison of the random, biased and QC measurement results against the PDSP Table 7-1 Surface Contamination Guideline limits was conducted; the comparison demonstrates that this survey unit passes the criterion specified in the PDSP.*

Survey Area: D

Survey Unit: 707218

Building: 707

Description: Main Building Exterior - Vault walls

## Instrument Data Sheet

Inst/RCT Number	RCT ID	Analysis Date	Instr Model	Instru S/N	Probe Type	Calibration Due Dt	Instru Efficiency		A-Priori MDA (dpm/100cm <sup>2</sup> )		Survey Type
							Alpha	Beta	Alpha	Beta	
1	571827	10/03/04	Electra	3979	DP-6	02/06/05	0.218	NA	48.0	NA	T/S
2	511233	10/03/04	Electra	3980	DP-6	03/21/05	0.219	NA	48.0	NA	T/S
3	571827	10/03/04	SAC-4	1468	NA	02/23/05	0.333	NA	10.0	NA	R
4	511233	10/03/04	SAC-4	760	NA	02/28/05	0.333	NA	10.0	NA	R

Survey Types: T = Total Surface Activity, Q = TSA QC, S = Scan, R = Removable Surface Activity, I = Investigation

Survey Area: D

Survey Unit: 707218

Building: 707

Description: Main Building Exterior - Vault walls

**Random Removable Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707218PRP-N001	4	0.0	N/A	
707218PRP-N002	4	0.0	N/A	
707218PRP-N003	3	-0.3	N/A	
707218PRP-N004	3	2.7	N/A	
707218PRP-N005	3	-0.3	N/A	
707218PRP-N006	3	-0.3	N/A	
707218PRP-N007	3	-0.3	N/A	
707218PRP-N008	4	0.0	N/A	
707218PRP-N009	3	1.2	N/A	
707218PRP-N010	4	0.0	N/A	
707218PRP-N011	3	1.2	N/A	
707218PRP-N012	4	0.0	N/A	
707218PRP-N013	3	-0.3	N/A	
707218PRP-N014	4	1.5	N/A	
707218PRP-N015	4	0.0	N/A	

Comments:

Survey Area: D

Survey Unit: 707218

Building: 707

Description: Main Building Exterior - Vault walls

**Random/QC Total Surface Activity Data Sheet**

Random Measurement Location	Inst / RCT Nbr	Net Alpha (dpm/100cm <sup>2</sup> )	Net Beta (dpm/100cm <sup>2</sup> )	
707218PRP-N001	1	11.2	N/A	
707218QRP-N001	2	48.6	N/A	
707218PRP-N002	1	26.8	N/A	
707218PRP-N003	1	47.9	N/A	
707218PRP-N004	1	32.8	N/A	
707218PRP-N005	2	38.5	N/A	
707218QRP-N006	1	67.2	N/A	
707218PRP-N006	2	60.0	N/A	
707218PRP-N007	1	51.1	N/A	
707218PRP-N008	1	38.7	N/A	
707218PRP-N009	2	35.8	N/A	
707218PRP-N010	1	41.9	N/A	
707218PRP-N011	2	32.6	N/A	
707218PRP-N012	1	29.6	N/A	
707218PRP-N013	2	29.4	N/A	
707218PRP-N014	1	51.1	N/A	
707218PRP-N015	2	75.0	N/A	

Comments: >5% of the area was surveyed. All values <300 dpm/100 cm<sup>2</sup>.

391

# **RADIOLOGICAL CLOSEOUT SURVEY FOR THE 707 CLUSTER**

Survey Area: D

Survey Unit: 707218

Classification: 3

Building: 707

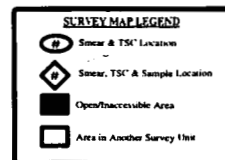
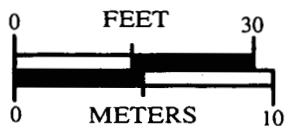
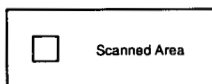
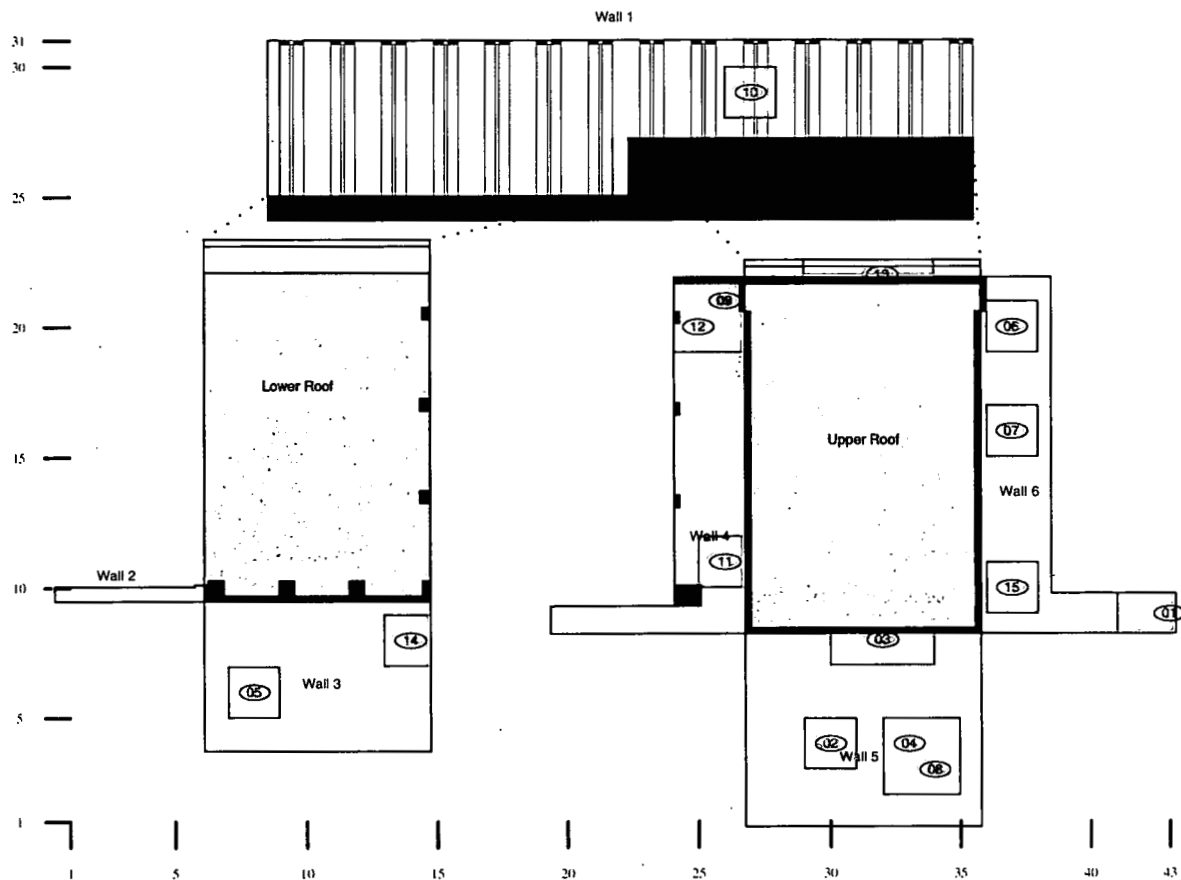
Survey Unit Description: Main Building Exterior (Vault Walls)

Total Floor Area: NA

Total Area: 353 sq. m

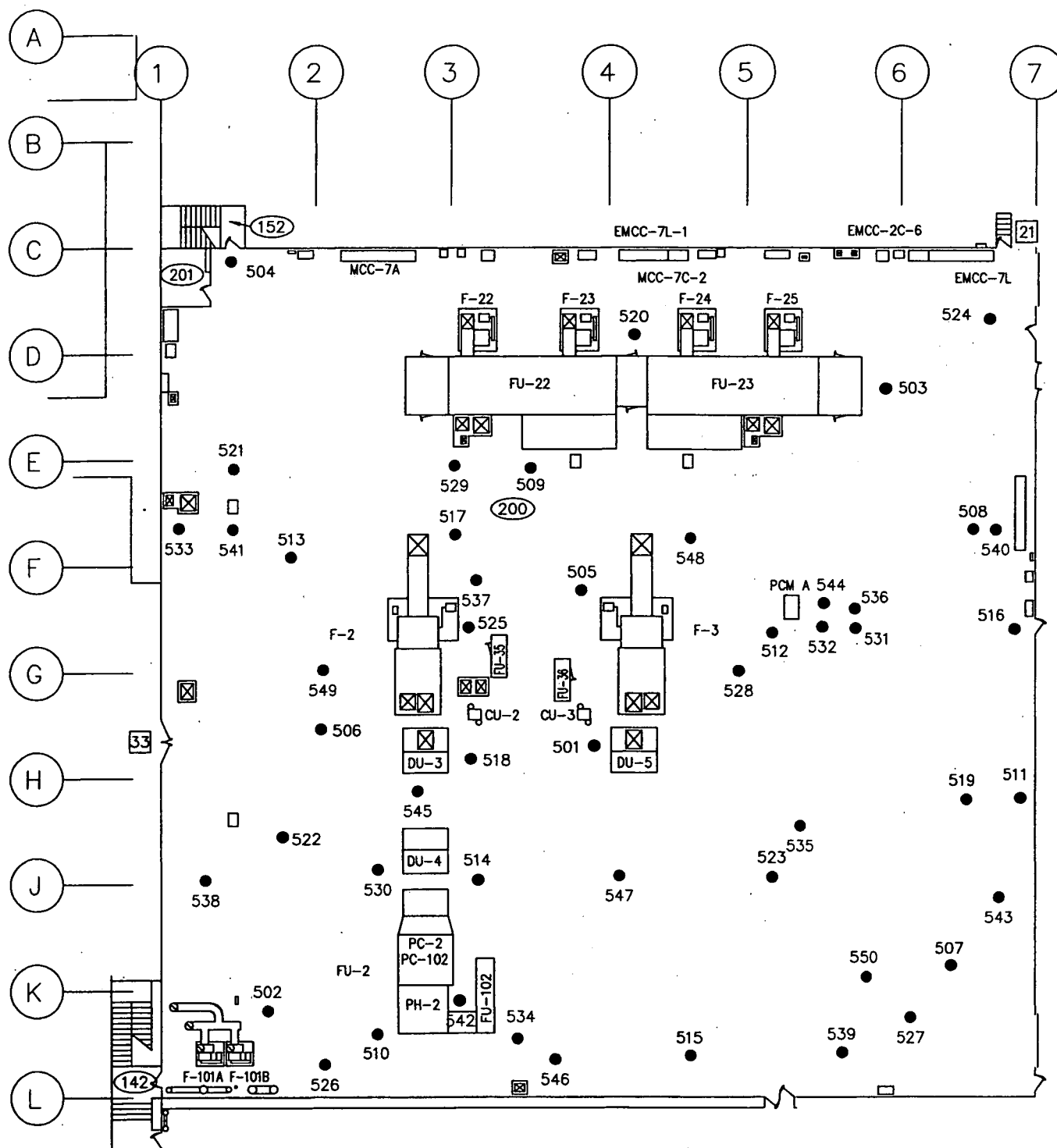
Random Start Grid Size: NA

**SURVEY UNIT 707218 - MAP 1 OF 1**



ATTACHMENT C

Chemical Data Summaries and Sample Maps



# Industrial Hygiene Information System Sample Results Report

SURFACE

Page:

1 of 4

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
707-08272004-31-501	SURVEY	200	FINAL SURVEY BERYLLIUM W-63, S-56	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-502	SURVEY	200	FINAL SURVEY BERYLLIUM W-12, S-111	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-503	SURVEY	200	FINAL SURVEY BERYLLIUM W-129, S-28	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-504	SURVEY	200	FINAL SURVEY BERYLLIUM W-156, S-110	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-505	SURVEY	200	FINAL SURVEY BERYLLIUM W-86, S-67	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-506	SURVEY	200	FINAL SURVEY BERYLLIUM W-62, S-107	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-507	SURVEY	200	FINAL SURVEY BERYLLIUM W-25, S-24	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-508	SURVEY	200	FINAL SURVEY BERYLLIUM W-104, S-17	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-509	SURVEY	200	FINAL SURVEY BERYLLIUM W-125, S-73	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-510	SURVEY	200	FINAL SURVEY BERYLLIUM W-19, S-72	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-511	SURVEY	200	FINAL SURVEY BERYLLIUM W-53, S-3	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-512	SURVEY	200	FINAL SURVEY BERYLLIUM W-89, S-40	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-513	SURVEY	200	FINAL SURVEY BERYLLIUM W-98, S-98	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-514	SURVEY	200	FINAL SURVEY BERYLLIUM W-44, S-86	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-515	SURVEY	200	FINAL SURVEY BERYLLIUM W-6, S-48	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-516	SURVEY	200	FINAL SURVEY BERYLLIUM W-86, S-1	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-517	SURVEY	200	FINAL SURVEY BERYLLIUM W-105, S-85	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Page: 315-395-434-439-441  
DOES NOT CONTAIN  
OFFICIAL USE ONLY INFORMATION

Directed by: J.A. Nethem DOB M471.3-1  
Name: J.A. Nethem Date: 11/5/08

OFFICIAL USE ONLY



## Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
707-08272004-31-518	SURVEY	200	FINAL SURVEY BERYLLIUM W-63, S-76	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-519	SURVEY	200	FINAL SURVEY BERYLLIUM W-54, S-22	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-520	SURVEY	200	FINAL SURVEY BERYLLIUM W-150, S-47	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-521	SURVEY	200	FINAL SURVEY BERYLLIUM W-125, S-112	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-522	SURVEY	200	FINAL SURVEY BERYLLIUM W-42, S-106	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-523	SURVEY	200	FINAL SURVEY BERYLLIUM W-41, S-43	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-524	SURVEY	200	FINAL SURVEY BERYLLIUM W-157, S-11	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-525	SURVEY	200	FINAL SURVEY BERYLLIUM W-83, S-81	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-526	SURVEY	200	FINAL SURVEY BERYLLIUM W-0, S-98	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-527	SURVEY	200	FINAL SURVEY BERYLLIUM W-13, S-10	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-528	SURVEY	200	FINAL SURVEY BERYLLIUM W-88, S-41	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-529	SURVEY	200	FINAL SURVEY BERYLLIUM W-117, S-85	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-530	SURVEY	200	FINAL SURVEY BERYLLIUM W-53, S-95	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-531	SURVEY	200	FINAL SURVEY BERYLLIUM W-57, S-26	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-532	SURVEY	200	FINAL SURVEY BERYLLIUM W-76, S-55	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-533	SURVEY	200	FINAL SURVEY BERYLLIUM W-109, S-119	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-534	SURVEY	200	FINAL SURVEY BERYLLIUM W-9, S-81	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Industrial Hygiene Information System  
Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
707-08272004-31-535	SURVEY	200	FINAL SURVEY BERYLLIUM W-55, S-40	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-536	SURVEY	200	FINAL SURVEY BERYLLIUM W-77, S-29	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-537	SURVEY	200	FINAL SURVEY BERYLLIUM W-89, S-79	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-538	SURVEY	200	FINAL SURVEY BERYLLIUM W-25, S-114	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-539	SURVEY	200	FINAL SURVEY BERYLLIUM W-4, S-25	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-540	SURVEY	200	FINAL SURVEY BERYLLIUM W-98, S-12	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-541	SURVEY	200	FINAL SURVEY BERYLLIUM W-103, S-110	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-542	SURVEY	200	FINAL SURVEY BERYLLIUM W-24, S-86	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-543	SURVEY	200	FINAL SURVEY BERYLLIUM W-27, S-12	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-544	SURVEY	200	FINAL SURVEY BERYLLIUM W-111, S-29	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-545	SURVEY	200	FINAL SURVEY BERYLLIUM W-70, S-85	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-546	SURVEY	200	FINAL SURVEY BERYLLIUM W-4, S-74	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-547	SURVEY	200	FINAL SURVEY BERYLLIUM W-19, S-57	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-548	SURVEY	200	FINAL SURVEY BERYLLIUM W-100, S-50	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-549	SURVEY	200	FINAL SURVEY BERYLLIUM W-76, S-109	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-550	SURVEY	200	FINAL SURVEY BERYLLIUM W-19, S-37	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Building Subtotal: 50

Hygienist Subtotal: 50

### **Beryllium Contamination Closeout of Room 210**

Room 210 of building 707 was never listed on the Historical List of Rooms with potential beryllium contamination. Both baseline and routine sampling of this room found no removable beryllium contamination outside of the exhaust systems.

The final beryllium surveys for this area were collected on August 27, 2004. All samples collected were below the reporting limit of  $0.1 \text{ ug}/100 \text{ cm}^2$ . Samples were collected on horizontal surface from floor to ceiling.

Since no removable beryllium was detected, no further sampling is required.



# Industrial Hygiene Information System Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
707-09262004-31-601	SURVEY	210	FINAL SURVEY BERYLLIUM W-20, S-19	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-602	SURVEY	210	FINAL SURVEY BERYLLIUM W-67, S-72	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-603	SURVEY	210	FINAL SURVEY BERYLLIUM W-133, S-63	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-604	SURVEY	210	FINAL SURVEY BERYLLIUM W-159, S-7	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-605	SURVEY	210	FINAL SURVEY BERYLLIUM W-77, S-42	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-606	SURVEY	210	FINAL SURVEY BERYLLIUM W-76, S-8	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-607	SURVEY	210	FINAL SURVEY BERYLLIUM W-34, S-62	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-608	SURVEY	210	FINAL SURVEY BERYLLIUM W-138, S-42	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-609	SURVEY	210	FINAL SURVEY BERYLLIUM W-120, S-25	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-610	SURVEY	210	FINAL SURVEY BERYLLIUM W-63, S-24	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-611	SURVEY	210	FINAL SURVEY BERYLLIUM W-24, S-42	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-612	SURVEY	210	FINAL SURVEY BERYLLIUM W-88, S-60	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-613	SURVEY	210	FINAL SURVEY BERYLLIUM W-106, S-36	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-614	SURVEY	210	FINAL SURVEY BERYLLIUM W-6, S-6	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-615	SURVEY	210	FINAL SURVEY BERYLLIUM W-26, S-79	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-616	SURVEY	210	FINAL SURVEY BERYLLIUM W-119, S-73	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-617	SURVEY	210	FINAL SURVEY BERYLLIUM W-128, S-10	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-618	SURVEY	210	FINAL SURVEY BERYLLIUM W-39, S-				

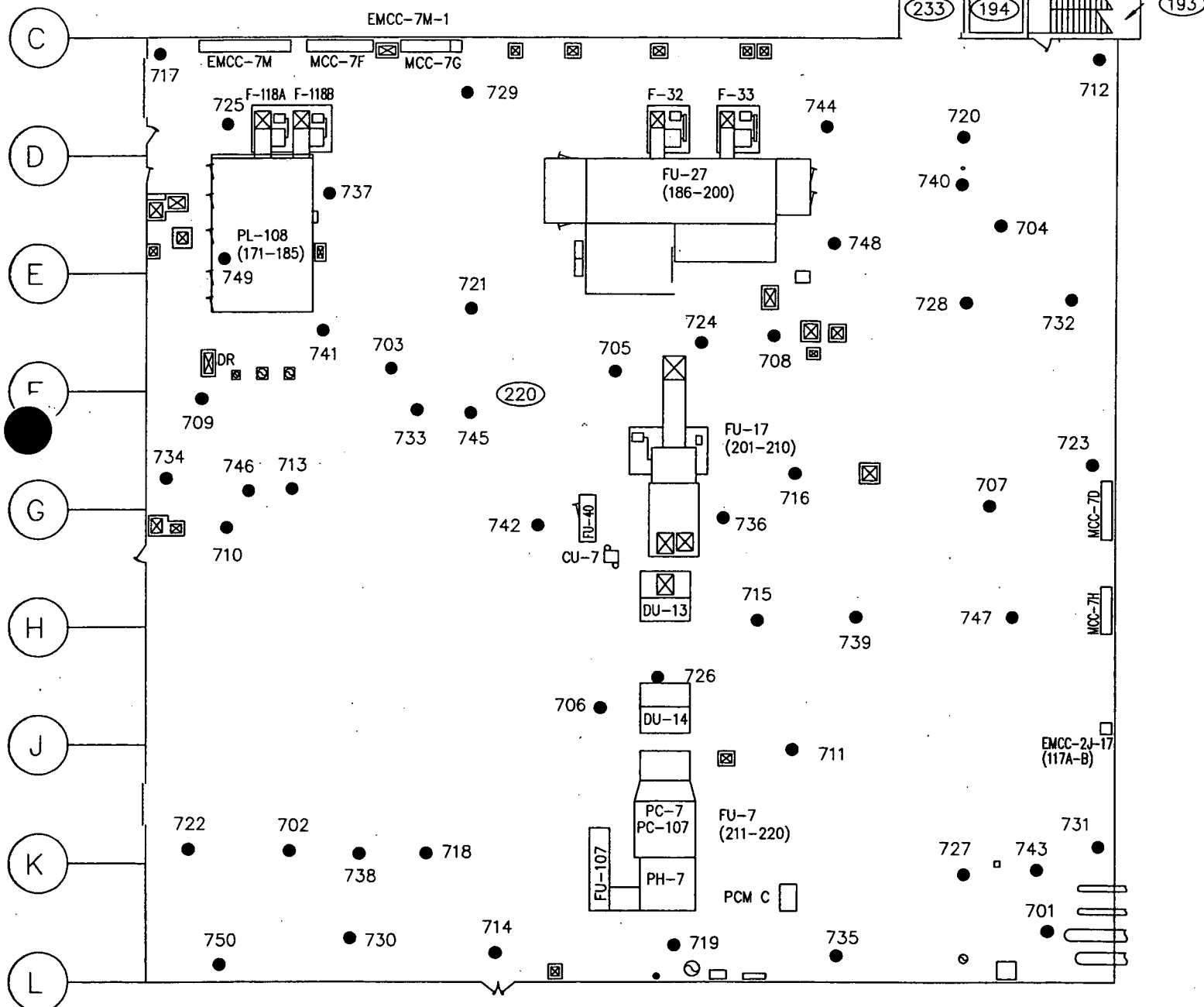
Industrial Hygiene Information System  
Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
31	WIPE	04C0728	BERYLLIUM AND B < 0.1000 _ UG/100CM2				
707-09262004-31-619	SURVEY	210	FINAL SURVEY BERYLLIUM W-1, S-65	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-620	SURVEY	210	FINAL SURVEY BERYLLIUM W-106, S-51	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-621	SURVEY	210	FINAL SURVEY BERYLLIUM W-156, S-32	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-622	SURVEY	210	FINAL SURVEY BERYLLIUM W-45, S-14	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-623	SURVEY	210	FINAL SURVEY BERYLLIUM W-44, S-53	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-624	SURVEY	210	FINAL SURVEY BERYLLIUM W-151, S-70	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-626	SURVEY	210	FINAL SURVEY BERYLLIUM W-5, S-27	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-627	SURVEY	210	FINAL SURVEY BERYLLIUM W-56, S-61	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-628	SURVEY	210	FINAL SURVEY BERYLLIUM W-84, S-49	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-629	SURVEY	210	FINAL SURVEY BERYLLIUM W-155, S-21	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-630	SURVEY	210	FINAL SURVEY BERYLLIUM W-75, S-30	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-631	SURVEY	210	FINAL SURVEY BERYLLIUM W-30, S-71	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-632	SURVEY	210	FINAL SURVEY BERYLLIUM W-96, S-71	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-633	SURVEY	210	FINAL SURVEY BERYLLIUM W-106, S-15	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-634	SURVEY	210	FINAL SURVEY BERYLLIUM W-37, S-8	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-635	SURVEY	210	FINAL SURVEY BERYLLIUM W-17, S-64	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-09262004-31-636	SURVEY	210	FINAL SURVEY BERYLLIUM W-125,				



11 12 13 14 15 16 17



707 2nd Floor Room 220  
Be Sample Locations

707-08272004-31-xxx (Floor)

707-08272004-31-xxx (Elevated)



# Industrial Hygiene Information System Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
707-08272004-31-701	SURVEY	220	FINAL BERYLLIUM SURVEY W-3, S-5	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-702	SURVEY	220	FINAL BERYLLIUM SURVEY W-25, S-100	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-703	SURVEY	220	FINAL BERYLLIUM SURVEY W-133, S-90	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-704	SURVEY	220	FINAL BERYLLIUM SURVEY W-114, S-20	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-705	SURVEY	220	FINAL BERYLLIUM SURVEY W-83, S-63	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-706	SURVEY	220	FINAL BERYLLIUM SURVEY W-33, S-66	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-707	SURVEY	220	FINAL BERYLLIUM SURVEY W-62, S-27	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-708	SURVEY	220	FINAL BERYLLIUM SURVEY W-130, S-42	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-709	SURVEY	220	FINAL BERYLLIUM SURVEY W-98, S-115	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-710	SURVEY	220	FINAL BERYLLIUM SURVEY W-63, S-93	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-711	SURVEY	220	FINAL BERYLLIUM SURVEY W-33, S-38	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-712	SURVEY	220	FINAL BERYLLIUM SURVEY W-155, S-2	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-713	SURVEY	220	FINAL BERYLLIUM SURVEY W-98, S-97	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-714	SURVEY	220	FINAL BERYLLIUM SURVEY W-5, S-72	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-715	SURVEY	220	FINAL BERYLLIUM SURVEY W-56, S-51	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-716	SURVEY	220	FINAL BERYLLIUM SURVEY W-96, S-39	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-717	SURVEY	220	FINAL BERYLLIUM SURVEY W-160, S-111	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-718	SURVEY	220	FINAL BERYLLIUM SURVEY W-34, S-				

Industrial Hygiene Information System  
Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
81	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2			
707-08272004-31-719	SURVEY	220	FINAL BERYLLIUM SURVEY W-11, S-52	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-720	SURVEY	220	FINAL BERYLLIUM SURVEY W-145, S-24	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-721	SURVEY	220	FINAL BERYLLIUM SURVEY W-119, S-78	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-722	SURVEY	220	FINAL BERYLLIUM SURVEY W-34, S-111	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-723	SURVEY	220	FINAL BERYLLIUM SURVEY W-64, S-1	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-724	SURVEY	220	FINAL BERYLLIUM SURVEY W-113, S-51	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-725	SURVEY	220	FINAL BERYLLIUM SURVEY W-126, S102	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-726	SURVEY	220	FINAL BERYLLIUM SURVEY W-57, S-72	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-727	SURVEY	220	FINAL BERYLLIUM SURVEY W-21, S-22	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-728	SURVEY	220	FINAL BERYLLIUM SURVEY W-90, S-26	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-729	SURVEY	220	FINAL BERYLLIUM SURVEY W-147, S-80	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-730	SURVEY	220	FINAL BERYLLIUM SURVEY W-8, S-90	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-731	SURVEY	220	FINAL BERYLLIUM SURVEY W-30, S-2	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-732	SURVEY	220	FINAL BERYLLIUM SURVEY W-99, S-11	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-733	SURVEY	220	FINAL BERYLLIUM SURVEY W-104, S-84	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-734	SURVEY	220	FINAL BERYLLIUM SURVEY W-79, S-115	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-735	SURVEY	220	FINAL BERYLLIUM SURVEY W-6, S-				

Industrial Hygiene Information System  
Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
36	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2			
707-08272004-31-736	SURVEY	220	FINAL BERYLLIUM SURVEY W-96, S-56	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-737	SURVEY	220	FINAL BERYLLIUM SURVEY W-129, S-100	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-738	SURVEY	220	FINAL BERYLLIUM SURVEY W-23, S-92	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-739	SURVEY	220	FINAL BERYLLIUM SURVEY W-65, S-36	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-740	SURVEY	220	FINAL BERYLLIUM SURVEY W-134, S-23	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-741	SURVEY	220	FINAL BERYLLIUM SURVEY W-111, S-97	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-742	SURVEY	220	FINAL BERYLLIUM SURVEY W-70, S-71	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-743	SURVEY	220	FINAL BERYLLIUM SURVEY W-22, S-13	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-744	SURVEY	220	FINAL BERYLLIUM SURVEY W-140, S-38	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-745	SURVEY	220	FINAL BERYLLIUM SURVEY W-98, S-76	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-746	SURVEY	220	FINAL BERYLLIUM SURVEY W-80, S-98	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-747	SURVEY	220	FINAL BERYLLIUM SURVEY W-63, S-18	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-748	SURVEY	220	FINAL BERYLLIUM SURVEY W-127, S-40	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-749	SURVEY	220	FINAL BERYLLIUM SURVEY W-119, S-110	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-08272004-31-750	SURVEY	220	FINAL BERYLLIUM SURVEY W-0, S-108	WIPE	04C0728	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Building Subtotal: 50

Hygienist Subtotal: 50

407

# Industrial Hygiene Information System Sample Results Report

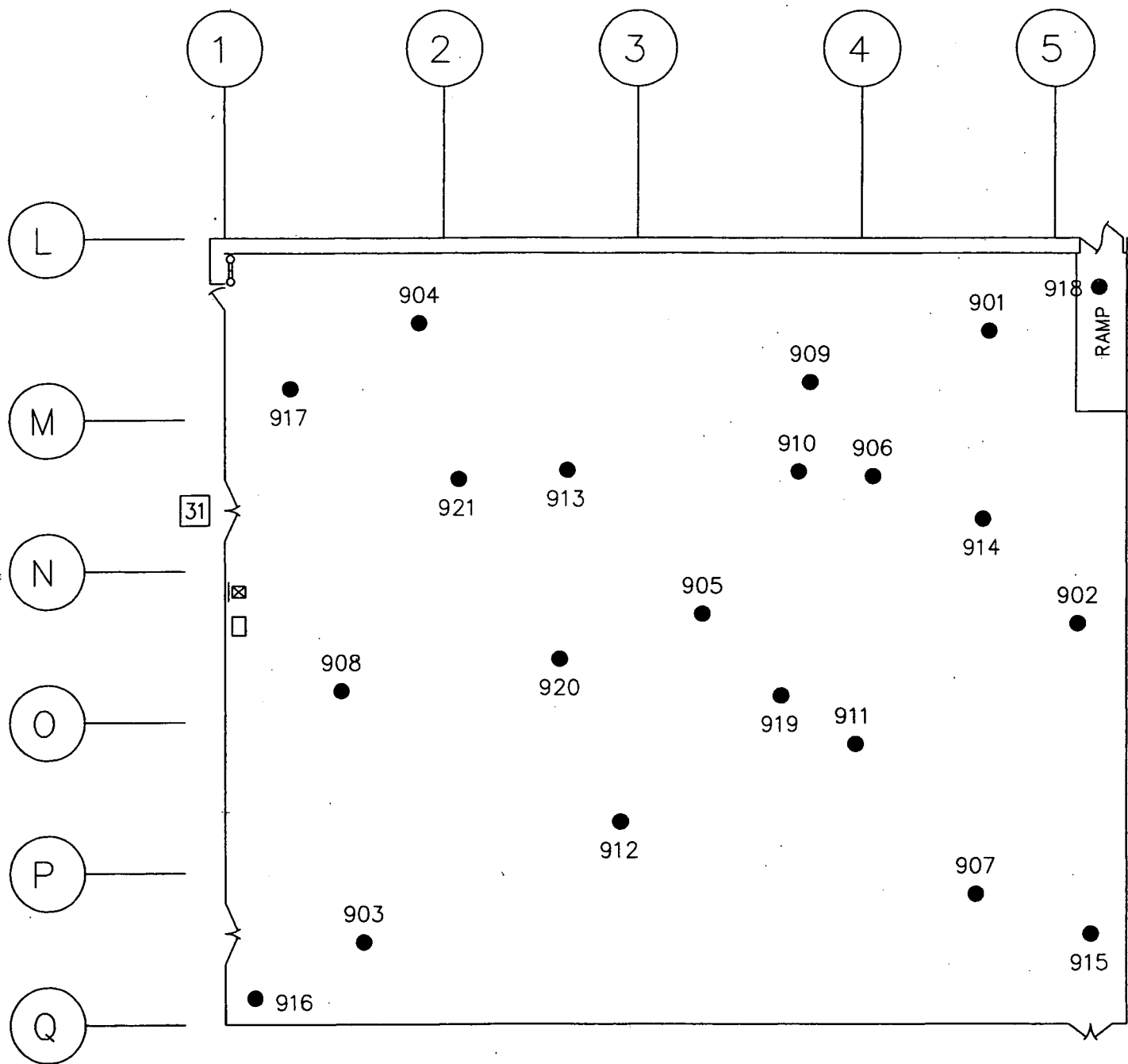
## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
---------------	----------	------	----------	------	--------	---------	---------------

RMRS

Company Subtotal: 50

Grand Total 50



707 2nd Floor Room Annex  
Be Sample Locations

707-10072004-31-xxx (Floor)

707-10072004-31-xxx (Elevated)

# Industrial Hygiene Information System Sample Results Report

## SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
707-10072004-31-901	SURVEY	240	FINAL SURVEY W-93, S-28	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-902	SURVEY	240	FINAL SURVEY W-38, S-5	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-903	SURVEY	240	FINAL SURVEY W-9, S-79	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-904	SURVEY	240	FINAL SURVEY W-88, S-81	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-905	SURVEY	240	FINAL SURVEY W-48, S-52	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-906	SURVEY	240	FINAL SURVEY W-73, S-14	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-907	SURVEY	240	FINAL SURVEY W-12, S-21	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-908	SURVEY	240	FINAL SURVEY W-33, S-89	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-909	SURVEY	240	FINAL SURVEY W-85, S-59	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-910	SURVEY	240	FINAL SURVEY W-70, S-41	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-911	SURVEY	240	FINAL SURVEY W-30, S-29	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-912	SURVEY	240	FINAL SURVEY W-16, S-51	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-913	SURVEY	240	FINAL SURVEY W-58, S-69	WIPE	05C0007	BERYLLIUM AND B	RESULTS PENDING
707-10072004-31-914	SURVEY	240	FINAL SURVEY W-51, S-20	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-915	SURVEY	240	FINAL SURVEY W-13, S-4	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-916	SURVEY	240	FINAL SURVEY W-1, S-99	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-917	SURVEY	240	FINAL SURVEY W-67, S-94	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-918	SURVEY	240	FINAL SURVEY W-95, S-2	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2

Date: 10/12/2004

# Industrial Hygiene Information System

## Sample Results Report

Page:

2 of 2

### SURFACE

Sample Number	Work Pkg	Room	Location	Type	Rin No	Analyte	Concentration
<b>RMRS</b>							
<b>FARLER, DAVID F</b>							
707-10072004-31-919	SURVEY	240	FINAL SURVEY W-30, S-46	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-920	SURVEY	240	FINAL SURVEY W-45, S-69	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-921	SURVEY	240	FINAL SURVEY W-54, S-87	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-922	SURVEY	240	FINAL SURVEY W-98, S-37	WIPE	05C0007	BERYLLIUM AND B	< 0.1000 _ UG/100CM2
707-10072004-31-923				BLANK	05C0007	BERYLLIUM AND B	< 0.1000 _ UG
707-10072004-31-924				BLANK	05C0007	BERYLLIUM AND B	< 0.1000 _ UG
707-10072004-31-925				BLANK	05C0007	BERYLLIUM AND B	< 0.1000 _ UG

Building Subtotal: 25

Hygienist Subtotal: 25

Company Subtotal: 25

Grand Total 25

ATTACHMENT D

Data Quality Assessment



## DATA QUALITY ASSESSMENT (DQA)

### Verification & VALIDATION of Results

V&V of the data confirm that appropriate quality controls are implemented throughout the sampling and analysis process, and that any substandard controls result in qualification or rejection of the data in question. A Data Quality Checklist was completed as required in PRO-478-RSP-16.04 *Radiological Survey/Sample Data Quality Analysis For Final Status Survey*. The required quality controls and their implementation are summarized in a tabular, checklist format for each category of data – radiological surveys and chemical analyses (specifically beryllium).

DQA criteria and results are provided in a tabular format for each set of surveys or chemical analyses performed; the radiological survey assessment is provided in Table D-1, and the beryllium assessment in D-2. A data completeness summary for all results is given in Table D-3.

All relevant Quality records supporting this report are maintained in the B707 Characterization Project Files. This report will be submitted to the CERCLA Administrative Record for permanent storage within 30 days of approval by the Regulators. All radiological data are organized into Survey Packages, which correlate to unique (MARSSIM) Survey Units. Chemical data are organized by RIN (Report Identification Number) and are traceable to the sample number and corresponding sample location.

Survey designs were implemented based on the transuranic limits used as DCGLs in the unrestricted release decision process. All survey results were evaluated against, and were less than the Transuranic DCGLw (100 dpm/100cm<sup>2</sup>).

### Summary



In summary, the data presented in this report have been verified and validated relative to the quality requirements and project decisions as stated in the original DQOs. All data are useable based on qualifications stated herein and are considered satisfactory without qualification. All media surveyed and sampled yielded results less than their associated action levels and with acceptable uncertainties.

Based upon an independent review of the radiological data, it is determined that the original project DQOs satisfied MARSSIM guidance. All facility contamination levels were below applicable unrestricted release levels, except as noted above. Minimum survey requirements were met, sampling/survey protocol was performed in accordance with applicable procedures, survey units were properly designed and bounded, and instrument performance and calibration were within acceptable limits.

**Table D-1 V&V of Radiological Surveys – B707 2<sup>nd</sup> floor & exterior**

V&V CRITERIA, RADIOLOGICAL SURVEYS		K-H RSP 16.00 Series MARSSIM (NUREG-1575)		
QUALITY REQUIREMENTS				
	Parameters	Measure	Frequency	COMMENTS
ACCURACY	Initial calibrations	80%<x<120%	≥1	Calibration using Alpha Group procedure and approved technicians.
	Daily source checks	80%<x<120%	≥1/day	Performed daily/within range.
	Local area background: Field	typically < 10 dpm	≥1/day	All local area backgrounds were within expected ranges
PRECISION	Field duplicate measurements for TSA	≥5% of real survey points	≥100% packages	N/A
REPRESENTATIVENESS	MARSSIM methodology: Survey Units 707003	Statistical	NA	Random w/ statistical confidence.
	Survey Maps	NA	NA	Random measurement locations controlled/mapped to ±1m.
	Controlling Documents (Characterization Pkg; RSPs)	Qualitative	NA	Refer to the Characterization Package (planning document) for field/sampling procedures (located in Project files); thorough documentation of the planning, sampling/analysis process, and data reduction into formats.
COMPARABILITY	Units of measure	dpm/100cm <sup>2</sup>	NA	Use of standardized engineering units in the reporting of measurement results.
COMPLETENESS	Plan vs. Actual surveys Usable results vs. unusable	>95% >95%	NA	See Table C-3 for details.
SENSITIVITY	Detection limits	TSA: ≤50 dpm/100cm <sup>2</sup> RA: ≤10 dpm/100cm <sup>2</sup>	all measures	MDAs ≤ ½ DCGL <sub>w</sub> per MARSSIM guidelines.

**Table D-2 V&V of Beryllium Results – B707 2<sup>nd</sup> floor & exterior**

V&V CRITERIA, CHEMICAL ANALYSES		DATA PACKAGE		
BERYLLIUM	Prep: NMAM 7300 METHOD: OSHA ID-125G	LAB: 	Johns Manville Corp. Denver, Co.	
		RIN: 	04C0728	
QUALITY REQUIREMENTS		Measure	Frequency	COMMENTS
ACCURACY	Calibrations Initial	linear calibration	≥1	No qualifications significant enough to change project decisions, i.e., classification of Type 2 facilities confirmed. All results were below associated action levels.
	Continuing	80%<%R<120%	≥1	
	LCS/MS	80%<%R<120%	≥1	
	Blanks – lab & field	<MDL	≥1	
	Interference check std (ICP)	NA	NA	
PRECISION	Laboratory Control Sample Duplicate	80%<%R<120% (RPD<20%)	≥1	
	Field duplicate	all results < RL	≥1	
REPRESENTATIVENESS	COC	Qualitative	NA	
	Hold times/preservation	Qualitative	NA	
	Controlling Documents (Plans, Procedures, maps, etc.)	Qualitative	NA	
COMPARABILITY	Measurement units	ug/100cm <sup>2</sup>	NA	
COMPLETENESS	Plan vs. Actual samples Usable results vs. unusable	>95% >95%	NA	
SENSITIVITY	Detection limits	MDL of 0.10ug/100cm <sup>2</sup>	All measures	

**Table D-3 Data Completeness Summary – B707 2<sup>nd</sup> floor & exterior**

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Beryllium	Survey Area: C  Room 200  Room 210   Room 220   Room 240	50 Random swipe samples on floor, walls, & components  25 Random swipe samples on floor, walls, & components  50 Random swipe samples on floor, walls, & components  25 Random swipe samples on floor, walls, & components	50 Random swipe samples on floor, walls, & components  25 Random swipe samples on floor, walls, & components  50 Random swipe samples on floor, walls, & components  25 Random swipe samples on floor, walls, & components	No beryllium contamination found at any location, all results below the regulatory limit	OSHA ID-125G  RIN 04C0728  No results above action level (0.2ug/100cm <sup>2</sup> ) or investigative level (0.1 ug/100cm <sup>2</sup> ).  See attached maps for sample locations.
Radiological	Survey Area: C  Survey Unit: 707008  Floor, walls and ceiling (including equipment in the overhead)	16 α TSA & 16 RSA (Random/Systematic)  40 biased TSA & RSA on equipment  2 QC TSA  5% scan of all accessible surfaces	16 α TSA & 16 RSA (Random/Systematic)  40 biased TSA & RSA on equipment  2 QC TSA  60% lower wall scan  17% upper wall/ceiling/equipment scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: C  Survey Unit: 707009  Floor, walls and ceiling (including equipment in the overhead)	16 α TSA & 16 RSA (Random/Systematic)  40 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces  25% lower wall scan & 10% upper wall/ceiling/equipment scan	16 α TSA & 16 RSA (Random/Systematic)  40 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces  95% lower wall scan  32% upper wall/ceiling/equipment scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: C  Survey Unit: 707010  Floor, walls and ceiling (including equipment in the overhead)	25 α TSA & 16 RSA (Random/Systematic)  25 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces  25% lower wall scan & 10% upper wall, ceiling, equipment scan	25 α TSA & 16 RSA (Random/Systematic)  25 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces  46% lower wall scan  20% upper wall/ceiling/equipment scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level

Pre-Demolition Survey Report, 2<sup>nd</sup> Floor and Exterior of Building 707  
Rocky Flats Environmental Technology Site

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area: C  Survey Unit: 707011  Walls and ceiling (including equipment in the overhead)	15 α TSA & 16 RSA (Random/Systematic)  50 biased TSA & RSA on equipment  2 QC TSA  25% lower wall scan & 10% upper wall, ceiling, equipment scan	15 α TSA & 16 RSA (Random/Systematic)  50 biased TSA & RSA on equipment  2 QC TSA  33% lower wall scan  11% upper wall, ceiling, equipment scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: C  Survey Unit: 707012  Floor, walls and ceiling (including equipment in the overhead)	15 α TSA & 16 RSA (Random/Systematic)  45 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces  25% lower wall scan & 10% upper wall/ceiling/equipment scan	15 α TSA & 16 RSA (Random/Systematic)  45 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces  31% lower wall scan  10% upper wall/ceiling/equipment scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: C  Survey Unit: 707016  Floor	40 α TSA & 16 RSA (Random/Systematic)  2 QC TSA  100% scan of all accessible floor surfaces	40 α TSA & 16 RSA (Random/Systematic)  2 QC TSA  100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: C  Survey Unit: 707017  Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic)  5 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic)  5 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: C  Survey Unit: 707018  Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic)  5 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic)  5 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: C  Survey Unit: 707019  Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic)  5 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic)  5 biased TSA & RSA on equipment  2 QC TSA  100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level

Pre-Demolition Survey Report, 2<sup>nd</sup> Floor and Exterior of Building 707  
Rocky Flats Environmental Technology Site

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area: C Survey Unit: 707020 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707101 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 10 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 10 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707102 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707103 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707104 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707105 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 15 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 15 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707106 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level

Pre-Demolition Survey Report, 2<sup>nd</sup> Floor and Exterior of Building 707  
Rocky Flats Environmental Technology Site

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area: C Survey Unit: 707107 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 15 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 15 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707108 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707109 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707110 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707111 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707112 Floor and equipment on floor	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all accessible floor surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707115 Walls and ceiling	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all lower wall surfaces and 50% scan of upper wall and ceiling surfaces	15 α TSA & 16 RSA (Random/Systematic) 5 biased TSA & RSA on equipment 2 QC TSA 100% scan of all lower wall surfaces and 54% scan of upper wall and ceiling surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level

Pre-Demolition Survey Report, 2<sup>nd</sup> Floor and Exterior of Building 707  
Rocky Flats Environmental Technology Site

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area: C Survey Unit: 707116 Walls and ceiling	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of all lower wall surfaces and 50% scan of upper wall and ceiling surfaces	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 100% scan of accessible lower wall surfaces and 50% scan of accessible upper wall and ceiling surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707300 Walls and ceiling	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 10 biased TSA & RSA on equipment 2 QC TSA 25% scan of all lower wall surfaces and 10% scan of upper wall and ceiling surfaces	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 10 biased TSA & RSA on equipment 2 QC TSA 82% scan of all lower wall surfaces and 11% scan of upper wall and ceiling surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: C Survey Unit: 707115 Equipment	220 biased TSA & RSA on equipment 11 QC TSA	220 biased TSA & RSA on equipment 11 QC TSA	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: D Survey Unit: 707200 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: D Survey Unit: 707201 Wall	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: D Survey Unit: 707202 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: D Survey Unit: 707203 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: D Survey Unit: 707204 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: D Survey Unit: 707205 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level

Pre-Demolition Survey Report, 2<sup>nd</sup> Floor and Exterior of Building 707  
Rocky Flats Environmental Technology Site

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC)	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area: D Survey Unit: 707206 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707207 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707208 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan of all surfaces	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan of all surfaces	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707209 Roof	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707210 Wall	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707211 Wall	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707212 Wall	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707213 Wall	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707214 Wall	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707215 Wall	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level
Radiological	Survey Area: D Survey Unit: 707216 Wall	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 $\alpha$ TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs  No results above action level



Pre-Demolition Survey Report, 2<sup>nd</sup> Floor and Exterior of Building 707  
Rocky Flats Environmental Technology Site

ANALYTE	Building/Area/Unit	Sample Number Planned (Real & QC)	Sample Number Taken (Real & QC )	Project Decisions (Conclusions) & Uncertainty	Comments (RIN, Analytical Method, Qualifications, etc.)
Radiological	Survey Area: D Survey Unit: 707217 Wall	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level
Radiological	Survey Area: D Survey Unit: 707218 Wall	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	15 α TSA & 16 RSA (Random/Systematic) 2 QC TSA 5% scan	No elevated contamination remaining at any location from DOE added nuclides; all values below PDS unrestricted release levels	Transuranic DCGLs No results above action level